The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1429.—Vol. XXXIII. LONDON, SATURDAY, JANUARY 10, 1863. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

Original Correspondence.

SPANISH REVISED TARIFF—REDUCTION IN COAL AND IRON.

SIR,—Most of your readers interested in the above matters are doubtless aware that a reduced scale of duties upon coal and iron imported into Spain came into operation on the 1st inst.; but as the details are, perhaps, not so well understood, I give the following, as a comparative statement, for their information:—

	Late tariff.	Present tariff.	Reduction.
Coal ..... per ton	£0 9 5½	£0 6 9	£0 2 8½
Pig-iron	1 14 6	0 15 9	0 18 9
Bar-iron	8 13 0	3 15 0	4 18 0
Hoops and sheets	8 18 6	5 12 6	3 6 0

From which it will be seen that the reduction upon pig and bar-iron is more than one-half. A considerable tax, however, is still retained, and English coal and bar-iron cannot be obtained even now at less than (say) from 40s. to 45s. per ton for the former, and 11*l.* to 12*l.* per ton for the latter. But if these figures are compared with the cost of production of iron in Spain, upon which fuel alone will amount to something like 8*l.* or 9*l.* per ton, upon the combined operations, after allowing for the reduction in the duty, the effect will be seen more palpably, and, from a national point of view, must be regarded as a step in the right direction; and, circumstanced as the makers of iron in Spain are in reference to fuel, such a measure on the part of their Government may be said to have a crushing influence upon them. In ordinary cases this would be the fact. It remains to be seen, however, how the consumers of iron in Spain are disposed to receive the boon offered them. A deep-rooted prejudice exists against the use of English iron in Spain, for which our own manufacturers have themselves to thank to some extent. My impression is that it will not be productive of such disastrous consequences to Spainish ironmasters as some persons would suppose. It has been their chief care to produce a quality of iron exactly suited to the wants of their own consumers, and the latter are so much in love with it as to exclude from their workshops any other kind, except, perhaps, in a very few special cases; hence their peculiar shrug of the shoulder, and frequent exclamation—"*Et Hierro Inglesa, malo.*" Nevertheless, I perceive that the manufacturers in Spain are fully alive to the importance of the question, and, with a view to lessen the danger with which their interests are threatened, have appealed to their Government, if not to withdraw the measure, at all events, to modify it, so that its action shall fall upon them as gently as possible; and this appeal the Government has now under its consideration. Whether the prayer of the petitioners will be fully answered remains to be seen.

This relaxation of duties, however, is no doubt regarded by the people at large with a high degree of satisfaction, because it evinces on the part of their rulers a disposition to take up free-trade principles, in the development of which the various Governments in succession have hitherto been so very tardy, and however far they may ultimately carry this enlightened policy, thereby proving that they legislate for the masses, and not for the few, still, in reference to some branches of their trade, it must have a limit. Time was when the French and American ironmasters had to make a similar demonstration to their respective Governments; but with them the crisis has reached a certain point, competition has done its work, and they still remain where it left them. Not so with Spain, however; the situation of things there is altogether different. France and America each possess valuable coal mines, and although Spain, like other countries, may have its quantum of this necessary article, still the fact has to be ascertained—at present it does not exist to any extent in a workable shape, and until it is fully and largely developed, and the country well provided with roads for its transit, so long will the Spanish ironmaster be placed upon an unequal footing with other countries; and if the iron trade of Spain is to exist at all, if the increased wants of the country are to be met by the native manufacturer, and the latter are to keep their establishments afloat, it must be by means of protection afforded by the laws of the country, and thus it is that I look upon any measure which would have a tendency of closing the existing works as being extremely improbable.

Jan. 8. E. T.

MINES, MINING, AND MINERS OF THE UNITED KINGDOM.

SIR,—It is truly somewhat amusing to see the energetic manner in which several of your correspondents (in criticising Mr. Hunt's paper on Mines, Mining, and Miners) deny that they, and the mining community in general, require any further instruction or enlightenment than that which they possess at present; though, at the same time, the letters from some would appear to suggest that to the writers themselves at least a more intimate acquaintance with Lindley Murray, and a smattering of science, would not come very much amiss.

It is far from my intention to assert that miners do not *practically* understand their work, in the particular district to which they may have been accustomed, and that in those districts they may be able to judge of the results which will, probably, be caused by the intervention of a cross-course, elvan dyke, or any other of the natural phenomena observed in their mines; but I think I am not far wrong in stating that our practical miners would be immensely aided in their researches for ore in their own districts, and still more so if removed to districts unknown to them, were they to allow themselves to be assisted and guided by the light of that science which they now so rudely sneer at and abuse.

Mr. Hunt is one of those pioneers in the path of scientific mining who has incessantly laboured, and not unsuccessfully, to bring to perfection the data which form the statistics of our mineral wealth; and it is with no small regret I find that the meed of praise which ought to have been tributed to him for his untiring exertions has been entirely merged and swallowed up in ill-natured and undeserved criticisms upon his last paper. Mr. Hunt, in his explanation forwarded to the *Mining Journal*, has ably and satisfactorily shown that he not only did not pretend to teach practical miners their duty at present, but wished instead, in a highly honourable and disinterested spirit, to assist them in collecting and recording data concerning the various mining phenomena which come under the notice of every intelligent miner, and thencefrom to form a general code of laws regulating the formation of lodes in the different metalliferous strata or veins of the earth, according to their respective location on the globe. By thus obtaining a mass of information from all the intelligent practical men, and condensing it into a compact tabular form, their sons and grandsons will ultimately become easily possessed of that knowledge which now takes us years of toilsome and costly experience to learn, and which, after all, must be limited to a local knowledge of the *very few districts* we can have had leisure *thoroughly* to examine.

Numerous instances might be adduced of the value of information collected in this manner from private sources; and I cannot mention one more to the point than the valuable summary and chart which Lieut. Maury, of the United States Navy, has formed, showing when and where we may expect certain currents and winds, at any point on the broad surface of the oceans, and the scientific mariner is now enabled by *his* instructions to steer clear away from the most violent hurricanes.

Some of your correspondents, who so indignantly refuse to be taught, should remember the saying of one of the *wisest men* who have lived in our land, that he felt he was as a little child picking up grains of sand on the shore of the ocean of knowledge. One of them has the ignorant vanity to give the precedence of discovering *spectrum* analysis to a Cornish miner, instead of Professor Bunsen; because, forsooth, he saw him burn some copper ore in the flame of a candle; he might as well have referred himself some centuries back to the *much despised* PROFESSORS of Pyrotechnics.

Stephenson and Armstrong, to whom Mr. J. Tonkin refers, did not disdain to be guided by the lamp of science, and the electric telegraph was invented and put in practice by one of the said *Professors*. Few will deny that mining has received many helps from science; witness, notably, the Davy lamp, blasting powder, and the electric spark for simultaneously exploding several holes; and in several mines on the Continent an apparatus is working unceasingly which shows the exact quantity of foul air or explosive gas in circulation in the mine. It would be difficult to estimate the enormous value of the coal which has been found by a due attention to the laws of geology, and the sums saved, which would, without geological aid, have been spent in fruitless search for coal where it could not exist. Lastly, I will mention the assistance furnished by a knowledge of geology to the sinkers of Artesian Wells.

It is not a century since a scientific gentleman informed the *practical* Cornish miners that they were throwing away some of their richest copper ores (the grey sulphides and the red oxide) upon the waste heap. We further find the Cornish miners at the present day submitting to have their ores sold by a system of valuation called assaying, which has long been known, and proved by scientific men, to be excessively inaccurate, and always acting against the miner. *Vide* Percy's "Metallurgy," pages 489 to 493, where it appears that the Cornish assay produced, on an average of 17 samples, 1·82 per cent. on the ore, or 8·72 per cent. on the copper—*less* copper than the ore truly contained. In some cases, indeed, we are told the loss amounts to 66 per cent. on the copper. See tables, pages 492 and 493.

I could mention a case where a practical miner drove a long adit, intending to cut a certain lode, and felt rather surprised to find the end of his level come out to grass, not very far from the point at which he had commenced, having described a figure like a horse-shoe. Of course, this gentleman would not condescend to use so scientific an instrument as a mining dial or theodolite. I do not make the above remarks invidiously, but only in the spirit of *fair play*, as it is evident a harsh construction has been put upon Mr. Hunt's observations, which he did not intend they should convey, and also because I am proud to be acquainted with many very intelligent and highly educated miners from Cornwall and other parts of England, who have no hesitation in availing themselves of the aid of science, and admit that our miners should be taught the reasons, as far as possible, *why certain things are done*, not confining their knowledge to reading, writing, and arithmetic. A miner without scientific and practical information derived from others, besides his own practice, resembles the soldier who knows how to load and fire his rifle, but does not take aim when he fires.

The writers of letters containing such invidious remarks as those from "A Working Miner" and "A Miner," on this subject, should have the courage to sign their names to them. WILLIAM REAY, Jun.

Bontddu, Dolgelly, Jan. 6.

MINES, MINING, AND MINERS OF THE UNITED KINGDOM.

CRITIQUE ON PROF. HUNT'S LECTURE (*continued*).

SIR,—I quote Mr. Hunt: "From this period (the reign of Elizabeth) the progress of our mineral industries is tolerably well defined, and we may record a steady advance in the rate of production, until we find the value of our metals and minerals, exclusive of building stones and clays, to have been, in 1861, 34,602,853*l.*"—"In 1856, Mr. John Taylor stated before a Committee of the House of Commons that there were no greater facilities for ascertaining the productive character of a mine now than formerly." Whatever was said in 1856 is true in 1862, and it is a sad reflection that it is so. The miner, working in solitude in the dark recesses of the rocks, has become thoughtful, with only the dreams of ignorance on which to employ his thoughts. The next sentence, with regard to spirits—Kobolds, Knockers, and Gnomes—is too trifling and absurd to be quoted as a part of Mr. Hunt's "creed;" no one in the present century will credit that he honestly believes in such a state of things, and it, like much of the rest of this extraordinary lecture, seems written as a blind to the true character of our miners, and the value of our mines. I could quote much more of this to the miner insulting monologue—such as the Cornish miners expressing their doubts by a phrase "Where it is, there it is," to which he adds, "If these are not the apologies of indolence and ignorance, they certainly are the utterances of despair." Mr. Hunt goes on to say, "It must be admitted that amongst the miners there is an entire absence of any method by which a knowledge may be obtained of the causes leading to the production of mineral deposits." Now, if all this were really true, as happily not one word of it is, on whom would the disgrace of such ignorance naturally fall? Certainly not on the mine agent or miner, who, engaged in an abstruse avocation, has not time to apply himself to those philosophical disquisitions and experiments that seem, unfortunately, to lead only in this instance to empirical egotism; but who, notwithstanding, contrive to obtain such a practical understanding of their business as to lead them right and successfully in their calling. I say, on whom should the disgrace fall? Here we have in London a Museum for receiving specimens of our mineral products, and machinery for collecting every fact connected with the science or statistics of mining; and we have men paid large salaries by Government for unclouding this pretended darkness, but they gaily go on to receive the salaries of the State, and blithely, if not gloatingly, dwell upon the ignorance it is their duty to dispel. But Mr. Hunt affords us no glimpse of light from the scientific regions that he has made his own: he seems rather, like the gods of old, to make merry at the mazy wanderings and aberations of us poor mortal miners below. He does, indeed, for our instruction quote one Mr. Wallace, on the formation of metals in the veins, thus—"It is shown that the accumulation of lead ore in the veins is directly connected with the facilities which were offered by the fissures for the flow of water through them." Mr. Hunt then adds, on his own account, "This water—if we read our author right—being atmospheric, and not as Werner and some others suppose, 'oceanic,' by this hypothesis derives its mineral matter from the rocks through which it penetrates, and that subsequently passing through the cracks, this is deposited in vein-matter against the sides or walls of the lode." Now, this might do pretty well for the limestone hills of Yorkshire and Derbyshire; but how will Mr. Wallace or Mr. Hunt apply this theory to the lodes in the Cornish mines, which are filled with metal for depths of 200 to 300 fms. under the level of the ocean? These gentlemen must certainly know enough of hydrostatics not to expect much flow of water, to use their own words, through the fissures of this set of rocks, surrounded as these rocks are on all sides, a few miles distant, by the waters of the Atlantic Ocean.

Mr. Hunt knows as well as I do that the laws relating to the deposition of the metals are so well understood, and their arrangement and order have been so much studied in Cornwall, that a host of miners, such as Captain Andrew Vivian, Capt. John Davey, Capt. Chenalls, the Messrs. Gundry, Mr. Williams, of Scorrier, Capt. Thomas Teague, Capt. J. Lyle, and the Capts. Thomas, by observing that the lodes are filled with ore opposite each other on the magnetic meridian, such as Basset, Penstruthal, Buller, Copper Hill, East Basset, Carn Brea, Great South Tolgus, South Tolgus, Old Tolgus, Old Tolgus United, and Great North Tolgus, in the Redruth district. In the Camborne district, West Seton, South Seton, Camborne Vean, Wheal Harriett, South Condurrow, Wheal Grenville, Bollenowe. In the Marazion district, Carn Perran, Wheal Charlotte, Old Wheal Neptune, Wheal Caroline, Owen Vean, Trewether Downs, Wheal Elizabeth, Treloweth, Wheal England, Lelant Consols, Wheal Margaret, Wheal Kitty, East Ruth, Wheal Speed, Providence. In the St. Just district, Lelant, St. Just United, and the range of mines running nearly north and south along the entire western coast. In Devonshire, Devon Great Consols, Hawkmoor, Bedford United, Gunnis Lake, South Bedford, Drake Walls, Wheal Arthur, Wheal Zion, Trelawny Consols, and Okel Tor. In fact, this order in the law of Nature regarding the deposit of the metals is so universal, and so easy to understand, that by making use of his common faculties in studying it, and by observing the nature of the gossans or outcrops of the lodes, which are usually made up of peroxide of iron, and the chromates of the metal contained in the veins below, these old miners have guided themselves and the shareholders who supported them with the capital, almost without error or exception, into immense fortunes. It was in this way that most of the fortunes of the Cornish families have been acquired. I can name agents who have opened from 12 to 15 mines in succession without making a single mistake in bringing each into a profitable state. If, then, the law of the formation of the metals is so well developed as to enable us to find the bodies of metal with almost unerring certainty, what is the use of these mystified statements as to our ignorance? It is quite true that the depth of these deposits has never yet been ascertained. Notwithstanding man, through his intelligence and power, has been enabled to construct machinery, and so to improve it as to keep pace with his necessities, and to follow down the masses of copper ore 300 fms. below the level of the ocean, he has not yet been able to ascertain the real depth to which they extend. This fact, although it shows the abundant supply of metal by a merciful Providence, I think does not in any way reflect upon the ignorance of man. I cannot imagine that there is anything in the nature or quality of the gossan on the tops of the lodes that will afford us the elements by which we may calculate the extent or amount of the bodies of metal below; *à priori*, if this were so I confess it would be well worth while to pursue our studies for the purpose of detecting these elements and weighing their properties, so as to arrive at such a desirable conclusion. There are many things hidden from the power of human scrutiny, such as the nature of the elements of the constituents of almost everything surrounding us, and the modes by which they are actuated in entering into the formation of things. This seems to be the secret of the Creator, not intended for finite knowledge; but we have to be thankful for such a demonstration of phenomena in the mineral kingdom as leads us directly to such a quantity of metal as is required by the state of the world, and with great practical advantages to everybody interested.

To the miner, the agent, the shareholder in mines, the refiner, and the users of the metals—the earth's inhabitants in general—there is nothing that can be fairly said to the disadvantage of mining that may not be as freely urged to the disadvantage of any other branch of industry. It is an occupation evidently directly provided by Omnipotence for the human family to exercise their intelligence, and to call forth their physical energies. It also pays as well as most other things—nay, better than many. The aggregate dividends paid in 1860, on a number of British mines, was 341,660*l.* upon an outlay of 628,800*l.*, equal to 54 per cent. upon all the capital required to work them. Their aggregate dividends had been 4,964,164*l.*, nearly five millions; while their market value was 2,471,539*l.*, upon which the mines were paying 13*l.* 16s. per 100*l.* as interest, or nearly 14 per cent. per annum. Now, to construct twenty British railways it took 249,658,030*l.*, the original shareholders contributing 124,260,995*l.*, and upon these contributions the holders in 1860 received 4¼ per cent. In Devon Great Consols the 1*l.* share is now selling for 500*l.*; the West Seton 47*l.* 10s. share is selling for 260*l.*; the Basset 5*l.* 2s. 6d. share is selling for 75*l.*; the South Wheal Frances 18*l.* 18s. 9d. share is selling at 105*l.*; and so forth; while these railways are burdened with debts to the extent of 125,397,629*l.*, and they pay a miserable dividend of 4*l.* 10s. per 100*l.* yearly; which is, in fact, not quite one-third of the 57 Cornish and Devon mines above alluded to. Taken collectively with these facts before us, allowing that there may be individual turpitude in dealing with this great accumulation of monetary security—allowing that there may be rigging in the market, disreputable scheming with designing promoters to [illegible] the unwary, and tricks with the agents and miners—allowing all this and much more, I cannot see sufficient grounds for the sweeping condemnation indulged in by Mr. Hunt. I think it may be better said of the miners what was said in a critique on the "Lives of the Stephensons," by Smiles, the other day in the *Daily Telegraph*—"These men were intellectual workers of rare strength and skill, and of splendid achievements; and their lives are evidence how large a proportion of intellectual problems have to be worked out by direct handling, and not through the medium of language." A truth which book-learned men are strangely unwilling to admit. And with reference to Mr. Stephenson's claim to the invention of the safety-lamp he adds—"That it can scarcely be believed that an invention so highly scientific should have been claimed by a person not even possessing a knowledge of chemistry." —— A WORKING MINER.

THE "SCIENCE" OF MINING AND GEOLOGICAL "THEORIES."

SIR,—It is to be regretted Mr. Hunt did not give a clear definition of what he meant by the "science of mining" in his paper read at the Society of Arts. There appears to be a considerable misconception on the subject in the minds of the reading public. If he intended to advocate and substitute the teaching of the old igneous doctrine to working miners, instead of being guided, as heretofore, by their own ideas, or even if he wished to keep them "posted" in the ever-changing hypotheses of our modern geologists and professors, and be guided by them, and not by their own experience, they would, indeed, have to delve like moles in the dark, without rule or order, and legitimate mining would soon come to grief. It is quite evident that Dr. Collyer thinks there can be no other science to guide miners than that assumed by speculative geologists. His letter in the last Journal of the Society of Arts, on Mr. Hunt's paper, is a perfect specimen of the kind of knowledge acquired in the so-called Mining Schools. It is lamentable to reflect that so much valuable time and money should be wasted in listening to such strange and wild notions of the supposed fiery state and condition of our rocks and minerals, which, as Dr. Collyer truly states, make it hopeless to attempt establishing anything worthy of the name of science, and more especially as applied to mining. The idea that a crystalline compound is a proof of an igneous origin, when that compound is found to contain 20 per cent. of water chemically combined, is, to say the least of it, unwarrantable and diametrically in opposition to the facts and the senses. Happily our leading mining agents have a far better and more exact knowledge of the rocks and their contents than that indicated by geological writers, and have a safer principle to guide them in the selection of mining ground and its exploration than mere loose hypotheses. When a survey is made with a legitimate object of mining, the intelligent and prudent mine agent first examines the character, composition, and structure of the ground, and seeks for the ordinary superficial metalliferous indications, in the same manner as a mineralogist would investigate compounds of crystals, their various forms, and their contents. The science of mineralogy does not require us to enter into the question of the origin of matter; it is confined to the immediate productions, forms, and contents. A thorough practical man would not trouble himself as to how the granites, the gneiss, the slates, the porphyries of the crystalline series were originally formed, whether by fire, steam, or (as we were taught to believe, and actually see forming daily) from water. A miner that understands his business requires no theories to embellish his report; like that of a lecture prepared for the amusement of the uninitiated. No; he must deal with the actual facts and conditions, and draw his conclusions accordingly. He would carefully examine the composition of the rocks, their configuration, internal structure, the angles and magnetic bearing of the fissures and cross-courses, the intersection of flookans, &c., and form a judgment on these data of their merits for mining enterprise. Even in sedimentary beds we have almost infallable guides, founded on long experience. In the metalliferous limestone of North Wales the productive parts of the veins are confined to a bed under the black shale; and in the North of England all the lead-bearing beds and the unproductive beds are well known. We also know the conditions in which the sedimentary productive beds must be, and the bearings of the veins, &c., to favour the accumulations of large masses of ore.

When all these conditions are carefully considered, in connection with local peculiarities, I unhesitatingly maintain that we can arrive at a correct conclusion as to the merits or demerits of any given mineral ground in 10 cases out of 12, which is as near as can be expected in such a complicated subject. It may be asked that if this be true, how is it that so much capital is wasted in mining speculations; and why should miners be employed to seek for metals in rocks where they never find them in paying quantities? Miners, or at all events, those who know their business, and do not lend themselves to mere speculators, are not responsible for such proceedings; and if there be monied men willing, occasionally, to make trials in barren rocks from mere fancy, let them do so, as without such explorations we should be in want of the negative evidence to prove the truth and the value of the "science of mining." The readers of the *Mining Journal* are well aware that I have published my views on the "science of mining" upwards of 20 years ago, and subsequently, in a series of papers; and every day proves the truth of what I first promulgated, and I am happy to state that even geologists are now beginning to appreciate their truth and value.

The geological theories which we see propagated in every periodical by those who have been trained to such doctrines, have almost undermined the pillars of our faith, and have thereby nearly brought all things terrestrial into confusion—a complete chaos. The minds of students, and even some of our divines, have become, through such teachings, so bewildered and blinded to facts that they can no longer see the beautiful order and the harmonious law of Nature, and the sublime truths which have been revealed to us. Let us, then, endeavour to check the growth of these assumed and presumptious notions, which have been lately spreading like rank weeds, contaminating the atmosphere with their misty and unhealthy emanations, which almost envelope and hide the sturdy trees of the world as well as the tree of knowledge, to the great injury of practical science and the well-being of the rising generation.

15, *Clarendon-gardens, W., Jan.* 6. EVAN HOPKINS, C.E., F.G.S.

MINES, MINING, AND MINERS OF THE UNITED KINGDOM.

SIR,—All subjects that do not admit of demonstration must be deemed hypothetical. However, in our theories we must be governed by the knowledge which science has revealed. The laws of nature are eternal—they admit of no mutability. Man's interpretation of a law of nature may be erroneous, but never the law itself. Geological science has demonstrated, beyond all cavil or dispute, that there are two great series of rocks covering the earth's surface; the first called igneous or primitive, the second sedimentary or aqueous. The proofs of the primary being igneous consist in their being non-stratified, compact, and crystalline, which could not have arisen from any other condition than that of intense heat; whereas the secondary indicate that they are the result of disintegration of the primitive by the action of water, lying on it in layers or stratifications. It necessarily follows that if at a remote period of the earth's existence it was in a liquid molten state, that at a still much more remote period it must have been in the condition of a dense gas or vapour. During this free or gaseous state all the materials arranged themselves in accordance with their specific gravities. This is the reason why the denser metals—as gold, platinum, and iridium are so scarce in proportion to those of lesser density, such as iron, copper, lead &c. Geogonic measurements indicate that the earth is a spheroid, flattened at the poles in the direction of the axis of rotation. This modelling would take place on any fluid mass subject to a rotary motion. Radiation for vast periods would cause it to cool. It is estimated from the gradual increase of heat experienced as we descend into the earth that at a depth of less than 30 miles the heat would be over 3000° Fahr. During the period of the consolidation of the primitive rocks most of those substances which enter into the secondary or stratified rocks, with elements of the water which constitute the ocean, were in a gaseous state. As the cooling advanced these were condensed on the surface—water covered the face of the earth. Antecedent to this period numerous convulsions and upheavings had taken place, consequent on the contraction of the material forming the crust of the earth. It was at this period that the first

fissures, rents, veins, or lodes were formed. It was not, however, until the deposit of the secondary rocks that those gigantic quartz veins were formed. The contractions at this period must have exerted enormous force on the interior molten mass, which caused the fissures, lodes, or veins to be filled with a heterogeneous mass, some in a native state —as gold, or alloyed with silver, platinum, iridium, palladium, &c. Most, however, have combined with sulphur as sulphides—as silver, lead, mercury, copper, and iron; others as silicates or carbonates, &c.

Mineral veins present no uniformity, sometimes for hundreds of yards of from 20 to 50 feet in width—these suddenly contracting, so that the walls of the lode are in contact with each other. This may continue for any extent, for the direction of the lode may be lost altogether, or may as suddenly re-appear after cutting through "the horse," as this contact is called by miners. It will be perceived that the deviation, size, and all other conditions appertaining to veins or lodes have been determined by mechanical force, consequent on the numerous catastrophes which have accompanied the earth's transition from the fluid to the solid state.

The splitting of the globe, subsequent to the first strata, has been in a different direction. This has caused the nonconformity between the two strata, and should this reoccur, the same deviation would exist. All veins may be divided into three classes — 1. Those of purely igneous origin.—2. Those of a mixed igneous and aqueous.—3. Those purely aqueous. It is impossible for anyone who has practically attended to the working of a mine not to come to the conclusion that the substances which compose the lode were not forced up in the most heterogeneous manner. The sulphides of silver and lead, 100 or 1000 feet, then large deposits of native silver, then lead, or even gold, copper, antimony, bismuth, &c. How could sulphur have combined with metals like iron, copper, mercury, lead, antimony, &c., in the form in which it is plentifully formed in nature if fire had not been the active agent to produce these sulphides?

I have examined many of the principal mines of Mexico, Chili, Peru, New Granada, and California. One remarkable deposit of gold in the latter country was at Carson's Hill—which is the highest point by some 3000 feet than the surrounding country, where about 4,000,000*l.* worth of gold was extracted in the space of about 50 feet of the quartz vein, which was about 16 to 18 feet in width. The lode below this "pocket" or "bunch" of gold was without a particle of the precious metal. In this case the deposition must have been purely igneous. On the contrary, in Mexico I saw a magnificent cluster of quartz crystals permeated and interlaced with threads of native silver. Here was the conjoint action of fire and water. In the case of the carbonates of zinc, lime, &c., there must have been the action of water.

From the foregoing remarks it must be evident no amount of scientific education could enable the miner to predict the character of a lode, or the value of a mineral deposit. If the structure of veins were regular, or their contents not of the most dissimilar character, then we might be able to arrive at correct data. As it is, we must be content to delve, and with that experience alone must we rest content. No doubt a scientific education will enhance the position of the miner, as it does all other vocations. Practice alone gives a certain knowledge, which is essential to success. No class of men—at least so far as my experience warrants me in forming a conclusion—are more able than the English miners; each is an adept in his own particular specialty. The copper or tin miner of Cornwall will not be conversant with a coal mine, nor a collier with the indications of a rich deposit of lead. My desire has been to concentrate, in the most succinct form, ideas relative to the origin and formation of metallic veins. If I have failed to do so, my apology must be that the subject, from its very nature, is one which would require more space than you would be able to place at my disposal.

Beta House, Alpha Road, N.W. ROBT. H. COLLYER, M.D., F.C.S., &c. &c.

[The foregoing letter was forwarded by Dr. Collyer to the Journal of the Society of Arts: at the writer's request, we transfer it to our Journal, and which we the more readily do as its contents are referred to by Mr. Evan Hopkins in another column.]

SCIENTIFIC AID TO THE PRACTICAL MINER.

SIR,—Although no one for one moment supposes that in the management of mines theoretical information can compete with practical experience, it is satisfactory to find that the opinion is continually gaining ground that it is positively necessary to give the practical miner a certain amount of sound scientific instruction, to enable him to perform his duties with greater pleasure to himself and with increased satisfaction to his employers. It is the growing extension of these views that must ensure the permanent success of the Royal School of Mines, and which, at the same time, will give the capitalist more confidence, that in embarking in a mining enterprise he is not relying upon mere chance and guess-work to return him a profit. Capitalists may rely that in proportion as scientific knowledge increases amongst their mine captains and miners, so will their profits increase also; for, instead of having men who are so over-confident in the systems which have been in use for ages that nothing can induce them to abandon their prejudices, they will have those who are not only eager to adopt actual improvements, but whose education will enable them readily to discriminate between the worthless and the valuable novelties submitted to them.

Although in England a Royal School of Mines is a comparative novelty —scarcely 12 years having elapsed since it was instituted—the value of such institutions has long been proved on the Continent, and some of the most successful discoveries may be traced to the students in those schools. Until within the last few months our only reliable work on metallurgy was that of John Arthur Phillips, who enhanced the value of his practical experience by following a complete course of study in the Paris School of Mines, and a large number of the most approved machines in Cornwall are but modifications of inventions which have originally emanated from the German schools. Now, this fact is no discredit to the Cornish miner, because he has not until very recently had opportunities of studying scientific subjects; but, inasmuch as the invention of the machines may be attributed to the possession of scientific knowledge by their inventors, it may certainly be inferred that, with the aid of science, the Cornish miner might be placed as far above his present position as he at present considers himself to be above foreigners, under which term he includes all other than Cornishmen.

It will be satisfactory for your readers to learn that the Royal School of Mines is now in as satisfactory a condition as could be wished, and with such men in the professors' chairs as Ramsay for geology, Smyth for mining and mineralogy, Percy for metallurgy, Hofmann for chemistry, with Robt. Hunt and his assistants to procure and arrange authentic records, the student may rest assured that he will be taught how to think for himself rather than to rely upon the thoughts of others. With instruction of this character the English miner need not fear but that he will long continue to maintain the character he now enjoys.—*Jan.* 6. MENTOR.

EDMUND'S MAIN CATASTROPHE, BARNSLEY.

A FEW THOUGHTS AND SUGGESTIONS TO SIR G. GREY, HOME SECRETARY.

SIR,—Colliery accidents of late years have been so fearful and frequent, that after they are over, and beyond a few days of public excitement, they die away, like all other things of ordinary occurrence, and are only added to the long chapter of accidents flesh is heir to, and to which the mining population seem peculiarly fated,—the general opinion being that these sad calamities are unavoidable and unpreventable in the dark, dreary, unhealthy caverns below, where the poor fellows dig to secure to us our daily comforts, and while thus engaged so often meet their sad untimely fate. A picture so fraught with gloom and terror makes humanity, in its civilised exhalted state, and especially in this age of science and achievements, stand agast with horror and utter bewilderment. And are these fearful catastrophies in coal mines unavoidable? Surely not. An ordinary chemist would say and prove to us that gas in a coal mine, or anywhere else, might and could be so mixed with atmospheric air as to render it *non-explosive*, or, in other words, might be so rendered by admixture with air in mines as to make it impossible, in the event of an explosion, doing much serious damage. I know, in giving utterance to this idea, I may be called a theoriser. My answer is—I speak as unto wise men; judge ye what I say.

Vast amounts of money from time to time have been spent in parliamentary committees, to investigate and report upon the condition of the coal mines of this country. Such reports have been very elaborate, well considered, and highly interesting, containing, as they do, the opinions of nearly all the most eminent men in this country. They are my authority, and are before me; and all alike have agreed, and reported therein, upon the preventability of fearful colliery explosions. How, then, are fearful colliery explosions to be lessened and prevented? A most important and vital question truly; but a reply to it has often been given, both by the decisions of all parliamentary committees, and every practical man of science who understands the *modus operandi* of gases in coal mines. Here, then, is the solemn, important answer. All alike say—*put plenty of air into and through* a coal mine. I am not going to argue the question as to its mode of creation: that would be only trifling with the question. It is sufficient to know that *air in almost any quantity* is attainable, either by furnace, fixed at the bottom of the upcast shaft, or by steam-jet or fans, if such be properly fixed and worked. It is, however, all important that such air, however produced, must not only be put into the pit, but properly sent *through every part of a pit* or mine. Failing this (mark), the great end of ventilation—efficient ventilation—will not, cannot, be answered. Yes, although the quantity of air was double that ever sent into a coal mine. The great secret of effective ventilation, so as to lessen and prevent fearful colliery explosions, is a knowledge to thoroughly *distribute* the air in every part of a mine, so as to render it impossible for the gas either to accumulate or explode; or if it should ignite, by a proper distribution of the air, as proposed, its fearfully destructive power would thereby be annihilated.

Sir George Grey well knows that so fully impressed have been the Government with this undeniably important fact in reference to the air, that the present Colliery Act provides, General Rule 1—"An adequate amount of ventilation shall be constantly produced in all coal mines, or collieries, and ironstone mines, to dilute and render harmless noxious gases, to such an extent that the working places of the pits and levels and workings of every such colliery and mine, and the travelling roads to and from such working places, shall under ordinary circumstances be in a fit state for working and passing therein." We have twelve Inspectors of Mines, with a salary of 600*l.* per annum each, and travelling expenses, whose duties are to see that all mines are in a safe working condition for the poor collier; or, in other words, to see, according to the General Rule above quoted, that ventilation in mines shall be such as to render harmless noxious gases: and, further, the Inspector is specially ordered by the 16th and 17th sections of the said Act to enquire into the "mode of lighting or using lights in the same (colliery), and into all matters and things connected with or relating to the safety of the persons employed in and about the same.' And, by sec. 17, he (the Inspector) is again further to enquire into "any matter, thing, or practice," which he may judge dangerous and unsafe, "in or connected with such mine or colliery."

At the late melancholy explosion at Barnsley there is abundant evidence before the jury showing, Sir George, the awful irregularity in using lights in that dangerous mine, and yet a verdict of "Accidental Death" is recorded. Mr. Nobody, as usual, is to blame. A plain man, who understands practically something of coal mining, may be allowed to ask—"Who warned the entombed miners of the consequences of such irregularities? When were they thus warned? And if they were not thus warned and cautioned, who dares to say that no one is guilty of the blood of these poor men? Looking seriously at all the facts before the jury, can anyone wonder at Mr. Parker, one of the jurymen, dissenting from his brethren, and handing to the coroner a written protest, explaining his dissent from the verdict of "Accidental Death." The question of giving a *bonus* of 1*l.* as a stimulus to the miners for pushing on the works in this dangerous part of the mine cannot be true; but if such be the fact, under the circumstances, it will meet with universal reprobation by all men who fully understand the perils of mining life: and surely, notwithstanding the verdict already given of "Accidental Death," by a *dipided jury*, Sir George Grey will order another searching investigation to be made into all matters and things connected with this dire calamity, in order, and for the purpose, that justice may be done to all parties concerned, and such fearful accidents prevented in future. Sir George Grey is not the man to shut his eyes to facts such as these produced before the jury in this case; specially when it so clearly in evidence appears that efficient inspection, supervision, and management here *might have prevented this dire calamity*. It is a matter of grave moment, affecting alike the Government, colliery proprietors, colliery stewarts, and the public, as to what ought to be done in future to render less frequent these overwhelming disasters in coal mines.

As knowledge is power, it seems to point us to a clear duty, which might have early and permanent good if at once adopted and attended to in the coal mines of this country, and to which I would beg Sir George Grey's attention. I would most respectfully suggest to him the propriety of ordering all the Inspectors to make *monthly reports* to the Home Secretary, setting forth to him the exact position of all the mines inspected, where situated, in what county, when inspected, the names of all pits and mines inspected, together with names of proprietors, so that by this method the Home Office might have a correct view of all mines actually inspected, and their real position revealed, as they should and ought to be; so that in every urgent case suitable advice might be given, in such a manner, and to such parties, that would be sure to have a salutary effect both upon Inspectors and colliery proprietors, and which would greatly tend, I doubt not, to prevent and lessen these fearful periodical slaughters in the coal mines of this country. I know, Sir George, that such monthly reports would necessarily entail a little extra labour; but what of that, when for a moment we consider that immortal man's eternal destiny is irrevocably fixed in a few brief moments by these sad and sudden events. The Inspectors' annual reports, and present mode of inspection, do not meet the case, or diminish these heart-rending calamities in mines; and surely anything that can be done should and will be done to save the mining population from total annihilation, and the country every where spared the continual sorrow occasioned by these crushing events. The Inspection Acts have been in operation more than 12 years, and yet, I believe, we have no positive record as to the actual extent coal mines have been PERSONALLY INTERIORILY inspected in this country. I know that Mr. Ingham, M.P., moved for returns in 1859, which are before me, of the number and the names of Inspectors of Coal Mines for England, Wales and Scotland, with their respective salaries, and the districts for which they act; also of the number of coal mines within such several districts, and of the visits of inspection in every district since the passing of the Act 18 and 19 Vic. cap. 108. These returns, however, are very deceptive, and do not give the separate number of mines personally interiorly inspected, neither do they state the number of coal mines within each Inspector's district that have never yet been once interiorly inspected by any Inspector. THOMAS STEPHENSON.

Rothwell, Leeds, Jan. 7.

RE-REGISTRATION OF PUBLIC COMPANIES.

SIR,—It may be useful to your correspondent, "Confused," and others, if you will insert the following reply received from the Registrar of Joint-Stock Companies in November last. J. H. ROBINSON.

Newcastle-upon-Tyne, Jan. 5.

"In reply to your letter, I beg to inform you that it is not necessary for a company, registered under the Act 19 and 20 Vict., c. 47, to re-register under the new Act; but any returns required to be made by such company under the 19 and 20 Vict., c. 47, must now be made under the Companies Act 1862."

REDUCTION OF GOLD QUARTZ.

SIR,—Your correspondent, "Observer," kindly, though anonymously, reviews and tries to correct my remarks in last week's Journal respecting the reduction of gold quartz: his conjectures, however, as to their being unnoticed by practical men, are unfounded, as abundant correspondence from *practical men* will testify. As regards the capabilities of stamps, I speak from observation and experience, not theory; they do *crush*, but do not *pulverise*. I do not assume, for I know perfectly well the contrary, that different classes of gold ores require the same kind of treatment: I referred to the crushing and amalgamation of *gold quartz*. Your correspondent, no doubt, believes *all owners* or *shareholders* in auriferous properties to be *thoroughly practical*, and capable of rejecting the *wrong* and carrying out the *right* method of treating gold ores; and so, quite superior to "aspiring patentees," &c. Well, *time has shown*, and will show again.

The correspondence of the Journal so often abounds with energetic assertions that whatever is proposed as *new* was known, or had occurred, to *someone long ago*, that things may be left as they are, so far as I am concerned; I merely wrote to draw attention to a process which has been fully and fairly tried, and found quite successful.

Mold, Jan. 5. THOS. L. COTTINGHAM.

GOLD MINING,—TREATMENT OF QUARTZ.

SIR,—The remarks of your correspondent, "Observer," on Mr. Cottingham's letter, are in accordance with the opinions of all practical men. Mr. Cottingham, like many others, may still be under the impression that the obstacles in realising large returns of gold are not in the quality or the contents of the quartz, or the raw materials treated, but in the mode of extraction. Quartz is quartz, and mundic is mundic, and as quartz with mundic produces gold in California and Australia, and even in a few spots in Wales, why should not the same kind of substance produce gold everywhere? This is the argument employed by many, especially by those who do not understand the subject, and is, for good reason, encouraged and supported by reckless speculators. Hence the cause why the opinions of charlatans, and all impossible gold-extracting, gold-producing, and even gold-making machines, are in demand, and held up before the public, and carefully kept from actual test, until the disposers of setts and the promoters of companies have made their market. Fortunately for Dolgelly, and the credit of English enterprise, one or two of the recent gold seeking companies have been formed for the legitimate object of making fair trials, under the superintendence of men who understand their business, and are well prepared to extract the gold the properties may contain, be that large or small. A LOOKER-ON.

ENGLAND AND AMERICA, FOR CAPITALISTS AND WORKMEN.

TO THE HON. H. GREELEY, EDITOR OF THE "TRIBUNE," NEW YORK.

BY FAVOUR OF THE "MINING JOURNAL."

SIR,—You may possibly recollect that I spent some time in your office the evening you were going to Rochester, previous to the election of Mr. Lincoln. The object of my visit was to impress you with the "idea" that there are coal and food districts in the southern of the Free States, and in the south and west, which could compete with England better without tariff than New England can with that of Mr. Morrill; and I beg, as one desiring fair play to all nations and people, that you will copy this letter, however you, at the same time, may disclaim its import.

Fourteen years have passed since having waited in the office of Messrs. Phelps and Dodge near an hour, during which the latter gentleman held forth to a friend on the high prospects of a railway, and the "future" of New England as connected with it, when, tired of my "position," I stepped up to his table, saying—"Mr. Dodge, I know nothing of politics, but have spent twenty years as partner, &c., of the Chairman of Ways and Means of Great Britain, and many a discussion had we on the 'ways and means' of making a nation prosperous, and I tell you there will be serious doings in the States if New England be 'bolstered up' as the site of their manufactures. She has not an item of the requisites, coal being the most essential."

High-flown language is out of place in such questions, and I shall use the most simple. It appears to me that the Americans take the wrong end in relying on tariff rather than "economical production" of manufactures of all sorts: coal, next to water, being by far the greatest weight of requirements in dwellings or factories, it must always, as it has in England, point out the site for the latter. When this town (of 185,000 people) was "a village near Rotherham," it was, by its superior smiths' and cheap household coal, and the "wonderful" variety of "grit" in grindstones, close at hand, silently undermining the cutlery trade, and its branches of steel-making, &c., of the world. Shame to say, while the busy-bodies of the town are running their heads against any idea that will make a "sensation" or "exhibition" of their talents, there has been no movement against the exportation to all nations of grindstones. The United States, like the continent of Europe, may be said to have none, for, though the former obtains some for farm or common use from Ohio, the States are chiefly supplied by a British province—Nova Scotia. The amount of mischief done the cutlery trade of England is, I believe, a thousand times greater than that paid for those grindstones, for which the quarries are worked night and day, and, as inferior of any article is disposed of with the least possible cost of conveyance, or nearest home, the best are notoriously at this moment being sent abroad. As artificial stone has been long in use, artificial grindstones may be a "possibility," as a set-off to the Reciprocity Treaty, which covers the export of these. But to return to New England. It is the vile treatment by truck shops, and other impositions, which disgust the men, and drive them back to England. There is scarcely a shop of a dozen men in Sheffield without one or more who have tried the States, and (with other points) found Yankee lads placed to work at anything they could manage, to "pick up" the trade, and the "Boss" to swear, in a year or two, as he drives away the foreigner, that such lad is the better workman. Of a score taken from Sheffield three months ago, several have returned already—the promise that their families should be got out, by the earnings of the men, before the stoppage of the cost of their own passage out, being broken—some of these returning to the expected two days' work weekly from the promised 1*l.* 17*s.* weekly; finding, also, that 6*l.* there makes only from 3*l.* to 4*l.* for a wife here, through the rate of exchange and expenses.

As to the advantages of a coal site. When "times" are at the worst, and "short of employ" brings the father's income down to mere bread for a family, his trust is that the children will earn the other desirables and indispensables; but what a drawback on this, where fuel is (as in New England usually in winter) from eight to ten times the price at Sheffield—where fuel, stove, and piping cost an average family in New as much as bread in Old England. Brought from the centre of Pennsylvania, it must be so. But so wilfully blind, or confident, are the capitalists of the States, that it is only one of a thousand cases of the sort that Major Brevost, having failed at Boonton and Danville (the best sites in the States for making bar-iron) could find capitalists to attempt it at Boston—the coal and pig-iron of the same (Pennsylvania) having to be taken to Boston, thereby nearly doubling the average cost of the two, and the bar-iron having to be taken to New York. This was, no doubt, done on the idea that Americans

"Know more of any trade by a hint
Than they that have been brought up in 't."

Or, to use the words of Mr. Dodge—"The energy of a New England man is equal to anything." I replied, in the words of the flatterer of the first Napoleon, Maret, to a general who had said, after Waterloo, that the cavalry could not be replaced—"Sir, we take a horse and place a man on his back, and immediately have a body of cavalry." This morning, for the first time, I see a line in the papers hinting at the instalment of President Davis, at Washington, and letting New England go. There is no other solution of the difficulties. Let the men of the factories and ports of New England spread over the States on such sites as suit their craft, and let every Nigger henceforth be "free born," and fed to a certain age, as formerly. It is only a handful of ironmasters, tanners, spinners, printers of cottons, &c., and their few hundred thousands of men, who desire high tariff in the States, excepting New England—a miserable corner as regards soil, space, and real property. To make England a present of her is a "myth." Canada will not have her, or any of her ways of business. I have held this doctrine fourteen years, and have addressed the leading statesmen of England respecting it, and I now trust, as the representative of coal amongst the newspapers of the world, the *Mining Journal* will not reject this. My letters from the States in the Journal of June, 1853, foretold the railway bubbles.—*Bank-street, Sheffield.* T. BUTLER.

ROARING WATER MINE.

SIR,—In my last letter, a few weeks since I predicted, an early discovery in this mine. I am glad to see by last week's report from the captain that in the Orchard level, which, so far as my recollection serves me, is driven about 120 fms., a good discovery has been made, in which he says the prospects of this lode alone are most cheering; and I believe the results at a deeper level will be good and permanent; it promises to produce large quantities of copper ore. The lode is more than holding its size, and the copper of a stronger and more permanent character, composed of beal metal and peacock copper ore. This result is most encouraging for Irish mining, and for those of us who are most anxious to draw English capital into this part of Her Majesty's dominions it is highly satisfactory. Its effects will not be lost upon the English public, and the advantage to the new company must be to strengthen the confidence of the shareholders; and I have no doubt but future results will be equally gratifying as the mine continues to develope its resources This part of the county of Cork is one of great promise, and in a few years, if capital and skill are brought to bear upon it with energy, will show results that will bear comparison with any of the mines in Cornwall or Devon, and will far eclipse any of the foreign speculations that have found their way on the London Exchange. We urge upon English speculators to come over to Ireland andhelp us. Our mountains are full of the metals you require for your uses and your merchandise, and may be obtained at far less cost than in any other mining district. The Irish will hail you as benefactors, as it will bring labour to their doors, the develope her national resources, and supply a new and valuable item in her national wealth.—*Jan.* 6. A DUBLIN MINER.

MINING IN THE ASHBURTON DISTRICT.

SIR,—Many are the qualities of man deserving praise, and each may be eulogised to eminence with its own attending circumstances; but the one with which I am at present most favourably impressed is PERSEVERANCE. We have various adages, even of schoolboy mouthing, informing us of the advantages of a true adherence to this virtue, and it is with much joy that I have witnessed another illustration of their truth, which has just occurred in favour of those gentlemen who have for some time past directed their efforts towards the exploration of the mineral resources of this district. At the Smith's Wood Mine they have discovered a splendid vein of copper ore; and let me here presage this to be the leading arm to larger masses. I have seen samples of the ore, which are of the richest description, and precisely similar to the opening deposits of the Caradon Mines; indeed, the similarity of this ore, and the geological formation of the district generally, are convincing proofs that we have every necessary constituent to ensure similarly pleasing results. This mine is in the killas formation, and in that favourite position of being just on its junction with the granite, from which latter formation this discovery appears to be coming as their drivage progresses towards it. It has been met with in the 24 fathom level, a few fathoms west of the engine-shaft, and is dipping east towards it, so that by sinking this a little deeper they will meet it at this point also, and thus be laying it open in length and depth. I have been several days in the district, and have been over most of the mines, but more particularly over this sett, being struck by its apparent indications, and happened to be there just as Captain Hosking came up from underground with the first produce of the late discovery. I could not help being pleased to see the satisfaction depicted on his countenance as he handed me the stones of ore, crumbling to pieces from their richness. "There, Sir," said he—but I must not give his own words; he, however, drew comparisons with our Caradon Mines, which, from the tub of rich ore then before us, could be no disparagement: my heart warmed towards him as I thought of my small holding in the mine, and I recollect that I shook him warmly by the hand on leaving him. By-the-bye, what a difference there is in shaking hands; and I do not think anyone experiences a greater variation in the interchange of that interesting ceremony than mining captains. There are the grips of friendship, affection, and respect, and many others which might be enumerated; but the one to be less envied, and one which is much practised with the hands of those agents who are unfortunate enough to hold the management of poor mines, is the grip of formality. How frequently have I seen the hand of such a man taken and dropped, as though the centre of gravity possessed an irresistible affinity for it; while I have also seen the hand of the captain who has been more fortunately located (though, perhaps, possessing less merit than the former), shaken with such vigour as to endanger a dislocation of the shoulder, and to induce the thus favoured man to think he is being tested as a brother of the masonic fraternity. These, however, are, I suppose, uncontrolable displays of human feelings, and since we are all children of humanity, must not be censured.

J. D.

THE WENDRON MINING DISTRICT.

SIR,—It is always gratifying for anyone who approves and supports legitimate mining to see their best hopes more than realised, as was the case at Wheal Basset and Grylls account. The promoters of this mine never had a shade of doubt that, if they continued to be supported by their spirited shareholders in the future as well as they had been in the past, success would be the result: that success has been arrived at, though much sooner than they expected, and in greater measure. A dividend of 1*l.* was declared, leaving a good balance in hand. Of course, the meeting passed off with great satisfaction, as all meetings, under the same circumstances, should. This district has suffered in times past from a kind of prejudice that it was out and away from all other districts, and that it was not one that would do for share-dealing or profits. There have been drawbacks to the subscribing of capital, and it is for want of capital, and its liberal use in careful hands, and not from the absence of the elements of success existing in the district, that we have not more good things like Basset and Grylls around us. The old name of Basset and Grylls—Porkellis United—acted most seriously against the getting up of of the new company; but it was an entirely ignorant prejudice, so far as the sett was concerned—the management in one case was bad, in the other it is good. There are some hopes than Wendron Consols will again move up; the stone has certainly improved of late, and the shares are firm at quotations. Garlidna has not done so well as it was expected it would; but the sett is good, and will require, and it deserves, a little more time and capital. East Lovell is reported to be paying its costs, and looking well in the bottom, where there is a large lode, not less than 5 ft. wide, and very speedy. There appears to be a peculiarity in the deposits of tin ground, which I should like Capt. Burgen to describe, if he would. At South Lovell there are three very interesting points to come off immediately, which I hope to speak well of in my next. There has been no settlement come to with the late purser and manager, which is to be regretted, as it works injuriously against the mine, and embarrasses the present respectable purser. Old Wheal Lovell is likely to make a fresh start on the south lodes, with a capital of 10,000*l.*, in 1000 shares, and, taking into account the present prices for tin, and the probability of their continuance, if not increase, I do not know a better speculation than this mine. I hear it has been well reported on by one or two first-class agents, whose word will go a long way with capitalists. I have reason to think that before long I shall have the pleasure of reporting that Trevenen and Tremenheere will have attained the same kind of success as Basset and Grylis—dividend paying, though not, perhaps, in an equal degree, the latter mine being shallow, the former deep, and naturally more expensive to open, on account of its depth, but in no other respect, the ground in the bottom of Trevenen being very easy. New Trevenen continues to open out very well for a young mine; there is a good lode in the flat-rod shaft. I do not hear of any change for the worse in the adjoining mine, Wheal Vale, or in Trumpet United. At Treworlis meeting the other day a call of 8*s.* per share was made, which was very proper, but which appears to have disappointed many of the shareholders. On the whole, our district is moving up, and we mean to have three or four mines hoisted up into the Dividend List before Jan. 1, 1864. STANNUM.

THE SANDSTONE COPPER MINES AT ALDERLEY EDGE AND GOUROCK will amply repay a visit, either as regards the interest attached by the novelty of such works in this country, or by the magnitude and importance of the promised results. Being largely interested in the Gourock Mine, and being in the neighbourhood of the Alderley, I availed myself of the opportunity thus afforded. The Alderley has been at work for some years, under the able management of the much regretted Mr. Mitchell, who was unfortunately killed by a fall into one of the deep holes in the underground works, when on duty, in November last. The mine has yielded prodigious returns, averaging 25 tons of copper precipitate monthly, although the sandstone, from whence it is derived, contains only an average produce of 1¼ per cent. of metallic copper; hence, it is evident the utmost care and skill must be exercised in the manipulation of the prodigious quantities operated on. The most rigid economy in management and material is everywhere manifest. The profits, although the dues are so high as one-twelfth, have reached to some thousands of pounds yearly. On my visit, the now acting manager and part proprietor, Mr. Downe, afforded every facility and information, and conducted me over every department of the curious and interesting process, which I had heard and believed was Mr. Henderson's patent. This Mr. Downe assured me was a fallacy; that Mr. Henderson had nothing, and never had anything, to do with it; and that it was a modification, or adaptation, of a process that was known and patented before Mr. Henderson was born. This was a most valuable piece of information for me, and I doubt not for others who have copper in sandstone properties, from which the copper must be extracted by acids to do so at a profit. As Mr. Henderson, when applied to respecting his supposed privilege, charged a royalty of 3*l.* per ton of copper ore for the use of his patent, this charge may now be avoided by practising the effectual method in use at Alderley Edge. The sandstone quarry, for such in truth it is, has been wrought to a large extent for copper and lead; of the latter, about 1000 tons have been returned. They have, also, vast quantities of cobalt and nickel. These latter ores have not yet been made available, though they have hundreds of tons ready for utilisation; preparations are, however, in progress to bring them to market in a highly valuable and saleable condition, which will yield the company a far greater profit than if sold in the crude state of ore. The ores are found in layers, very similar to the coal measures, embedded in sand, evidently detritus. The beds have a gentle dip to the south-east, and are dislocated at pretty regular distances by "throws" (to use a coal miner's phrase). Passing these throws, the workmen come into bare sandstone. Practice has so familiarised the authorities that these circumstances cause them but trifling uneasiness. They know pretty nearly where to find their temporarily lost prize, and the vast reserves beforehand prevent these matters from in any way retarding the works. At present there are thousands of tons discovered; and the workmen are preparing to take away a prodigious rock of cupiferous stone, to enable them more effectually to work a vast deposit of lead ore, consisting of blue and white lead. This is about to be converted, by a new process, into white lead, for painting, by a simple and cheap method: this will be a source of great saving compared with the old plan of selling the ore to smelters. On the whole, the place holds out hopes, nay, certainties, of great and very valuable returns for many years to come. It would be impossible to give an idea of the nature and position of the strata, except by elaborate diagrams; therefore, I more especially call attention to the produce, in the hope of assisting and encouraging those who may have similar properties, notwithstanding their being low in produce, to remember that at these celebrated mines the average is not more than 1¼ per cent. The process is extremely simple. It consists of grinding the stone to about the size usually done for copper ores, then submitting it to the action of muriatic acid, of 34 per cent. strength, for a duration of from 18 to 24 hours, when all the copper will be extracted, and the sand rendered perfectly white; the liquor is then drained off, allowed to clarify, and scrap-iron placed therein, which soon precipitates all the copper; the iron is washed, and the precipitate collected and cleansed, by being washed in a manner similar to "tin tossing" (this is to get rid of the decomposed iron); the precipitate is dried, and is then ready for market, and, when thus prepared, produces about 63 per cent. of copper. The produce, being so low as 1¼ per cent., is sadly depreciated in value when

the standard of copper is unduly depressed. During the late heavy decline, the Alderley Mine felt the effects most severely; but still the quantity made up the defects—wise foresight, and a worthy spirit of not "killing the goose for the sake of the golden egg," prevented the directory from availing themselves of the lead-produce to increase their dividends. This source of fresh productiveness and riches will be taken away in due time, so as to well repay the proprietary for their foresight and caution. Well would it be for many mines were these principles adopted and carried out. The Gourock Mine, though in sandstone, differs materially in the nature of its cupriferous deposit from that of Alderley. For some 10 to 20 ft. from the surface it is almost identical, except that it contains a large percentage of grey copper ore; this, being a sulphuret, is not easily soluble in acid; but this upper series yields, as per assay (Are), by Messrs. Bath and Sons, Swansea, 2¼ per cent.; by wet process it yields 1⅞. Beneath this bed the value of the copper strata gradually increases. It contains a strange mixture of sand, pebbles, and fossilised wood, together with semi-coal, very like lignite, partaking of something of the nature of decomposed jet, mixed with grey bell metal, and yellow and black copper ore. Beneath this, again, occurs a bed of attrited quartz pebbles, with sand, but the fossils are wanting. This portion yields an exceedingly rich grey sulphuret of copper, which can apparently be raised in any quantities. Sometime since Mr. Downe, as the best authority on such subjects, was commissioned to give advice on the subject; but up to yesterday I had not, neither do I think any of the shareholders had, information of his report, the manager at Gourock not vouchsafing to do so, or the committee being too supine or brow-beaten as not to know themselves. Mr. Downe, however, yesterday stated he considered the Gourock ore far richer than the Alderley, and that it could be extracted far more readily, and at considerably less cost; that, by crushing and washing the ore, or by dressing it in a round buddle, it could be brought up to 10 per cent., or more, and that by care the rest could be extracted with acid, similar to their process; that the ore must undergo the acid first, when the non-soluble could be readily rendered available; that he felt assured the Gourock could very soon be made remunerative, and would have no objection to make it so; that they had nothing like the grey ore in their mine, and that he had given all the information and suggestions, as desired. Why on earth they are not acted on, seeing there are some hundreds of tons of the soluble sort at surface, and some scores of tons of washable ores raised, I am at a loss to conceive. The committee are displaying a culpable neglect of duty, which I trust this paper, or a visit (I recommend the latter, when they may see Mr. Downe) will dispel.—GEORGE HENWOOD.

Meetings of Mining Companies.

EAST CARADON MINING COMPANY.

A general meeting of shareholders was held at the White Hart Hotel, Salisbury, on Wednesday—

Mr. ROBERT WALKER CHILDS in the chair.

Mr. C. R. NORTON (the purser) read the notice convening the meeting, and the minutes of the last were read and confirmed.

The CHAIRMAN said,—Gentlemen, I have, in the first place, to wish you all a happy new year; and in the next place to congratulate you upon the position and prospects of our East Caradon Mine. (Hear, hear.) I have great pleasure in informing you of what you will shortly hear from our excellent manager—that at no period in the progress of this mine has its prospects or its position been more favourable than at the present time. I must also congratulate you upon the fact that, under the considerable difficulties against which the working of this mine has had to contend during the past three months, our sales of ore have amounted to 10,314*l.*; and our costs, although increased by the necessity for the purchase of new pitwork, &c., which, of course, has added to the plant of the mine, have amounted to only 3032*l.*; the lords dues to 532*l.*, and the miscellaneous expenditure to 35*l.*; the total being 3597*l.* So that the actual nett profit for the quarter has been 6716*l.* Indeed, it may be said that the nett profits have amounted to 7000*l.*; because in our cost-sheets we have charged a considerable sum for additional plant required for the pitwork connected with our new engine; but as that has added to our plant, it cannot be considered an unproductive outlay. I may fairly state, then, that the actual nett profits of the mine during the past three months have amounted to 7000*l.* (Hear, hear.) This profit has been made under some difficulties on the part of the management, arising from the necessary alterations in the mine in connection with the new engine. Upon this occasion, gentlemen, you will permit me, perhaps, to exercise the Chairman's privilege of making a few remarks upon the general prospects of this now far-famed East Caradon Mine. I am a very old shareholder—in fact, your real Chairman (Mr. W. Fawcett) and myself are among the remaining members of the first committee of management. For the last ten years I have never ceased to give this mine my most unremitting care and attention, and, therefore, I speak with a knowledge of all the facts of the case. In the month of November last, an alteration had to be made in the pitwork in connection with our new engine. During that alteration it was necessary to stop the engine; but our excellent manager, bearing in mind the true interests of the shareholders, used every exertion to prevent such a circumstance diminishing the dividend, and by those exertions Capt. Seccombe has been enabled to continue the monthly sales of ore as hitherto, and to produce the satisfactory balance-sheet which will be this day presented to the shareholders. I feel it my duty to refer to Capt. Seccombe upon this occasion more prominently than I otherwise should do, because I regret to say that in certain quarters—not so deeply interested in the mine as we are—his conduct has been called in question, as well as his mode of management. Now, I wish to state emphatically, upon an experience of 10 years, that all such attacks are wholly unwarranted, for no man could have exerted himself more earnestly or energetically than has Capt. Seccombe. (Hear, hear.) I am sorry to be compelled to advert to personal matters, but I think it is very important that all who have an interest in this very valuable mine should know what are the real facts. Now, it has been stated in a periodical—I refer to the *Mining and Smelting Magazine*—by an authority to whom I must confess I do not attach any weight, that the discovery of our rich caunter lode was a "happy accident." Some gentleman was kind enough to send me, gratuitously, the circular which I hold in my hand, containing an extract from that periodical, or probably I never should have seen the paper, nor this circular. What we have to deal with are actual facts; we are not going into theories about "primitive" and "secondary" granite, because the South Caradon agents have effectually disposed of that question; but, as the depreciating statements contained in that paper have been put forward as facts, I cannot refrain from saying that, when public writers state things as facts, it is their duty to ascertain whether what they state is true or false, and the more especially when they reflect upon the most able, conscientious, and successful management of almost any in the county of Cornwall. (Hear, hear.) Now, the article extracted from this periodical states that "East Caradon has been working for many years north without success." What are the facts? In the year 1852, when the mine was first started, Capt. Seccombe, in the very first report that he presented to the adventurers, and in the very first paragraph of that report, states that "the adit level is being driven south, to cut one of our south lodes—the lode the South Caradon adventurers have erected a steam-engine upon—about 130 fathoms from our western boundary." In the face of that statement, made in 1852, I should like to know what becomes of the statement that the cutting of the caunter lode was a "happy accident?" for operations were continued, without the intermission of a single day, down to the 54 fm. level, when we cut the lode. Every report from the mine referred to the progress of the adit level south, and its progress was watched by all who knew its importance with the greatest possible interest. In October, 1853, our agent reported that he was "nearing the lode," and in 1854 we first cut it, and upon it we have been driving for two years; but between that and the next meeting Captain Seccombe, knowing the importance and value of this discovery, suggested that the opinion should be obtained of the principal agent of South Caradon. Accordingly, Capt. Oliver Trewren was requested to confer with Capt. Seccombe, and upon the receipt of his report, dated June, 1854, it was determined to suspend the great outlay that had been made in the northern part of the mine, and to prosecute the decisive point—that is, the ground between the shaft and the caunter lode. Now, I ask, what right has any person to state that this discovery was a "happy accident," when facts show that it is the result of skill, ability, energy, and perseverance? (Hear.) And we are told that "East Caradon has been working many years northward without success." What are the facts? That the north part of the mine has not been sunk 1 fm. since 1854, two years after the mine was started. The committee were advised by Capt. Trewren not to prosecute too many objects at once, and, therefore, we determined to continue the development of the south part only, with the exception of driving a cross-cut north from the bottom of the shaft. We went on for two or three years until we cut the lode in the 35. Our agent told us there was no ore, but that the result was a matter of certainty. Many of the shareholders became faint-hearted, and proposed to wind-up the company. I and others, however, resisted, believing that we should be rewarded by the perseverance and efforts of our agent. In 1857, being a little nervous, although having implicit confidence in our agent, I obtained another opinion, and the agent I engaged—a person of authority—informed me that Capt. Seccombe was perfectly right, and that the discovery made must be prosecuted. When we cut the lode in the 35, Captain Seccombe told us that the indications were promising, and that we must sink another 15 fms. We decided to go down that 15 fms., and in 1859 the lode was cut in the 50; the results are patent. I say it is due to Capt. Seccombe that these facts should be known. I confess that I have never, in the whole course of my experience, seen any man so deeply study the shareholders interest, so resolutely determine to overcome difficulties, or who had displayed such ability and success. Therefore, it is nothing but due to Capt. Seccombe that he should receive our congratulations, and the tribute which we are about to make to him in recognition of his fidelity. (Hear, hear.) There are other points with reference to the management of the mine that have been brought before us, involving the whole success of this undertaking—one, in particular, was this very south shaft. Many urged that this should be an underlying instead of a perpendicular shaft; but Captain Seccombe contended that the sinking of the original perpendicular shaft would be the proper course to adopt, and the result has proved the correctness of his views. Had the opinions of others been followed we should have been involved in inextricable difficulties, for it is found that the new lodes are underlying north, and coming towards our shaft. That very fact alone has saved us thousands of pounds. I say it is monstrous that men, after having once, or perhaps twice, inspected a property, should take upon themselves to criticise matters that have occupied the attention of the agent for years. I should never have entered into these matters but from what has occurred since the last meeting. We all know that industrious and studious attempts have been made to depreciate our property; we have been told that granite is coming in in the eastern ends, which is destroying our ore and our prospects for the future. Being a large shareholder, I have been overwhelmed with all sorts of gratuitous communications expressing these views from gentlemen I do not even know; but all I fear is that shareholders have been thus induced to dispose of their interest. It is most important that shareholders should know the source of these gratuitous communications, and that Capt. Seccombe would at all times give any authoritative information that might be desired. I advert with satisfaction to the fact that Capt. Seccombe has never stated anything with regard to this mine that has not been fulfilled, and that every prediction he has made has been fully verified. (Hear, hear.) I have found amongst my papers a map which, I think, will give information that shareholders should possess, for it shows that the discovery in the adit level was made 200 fms. from our present workings, so that for the whole distance between the north and south shafts there is an unexplored region of 200 fms. Why, that is a mine of itself; all these lodes run through it, although they have never been seen. But we are told our mine is short, although our agent tells us we have nearly ¼ mile of ground in length, which is intersected by about 14 lodes. This is a mine not merely of to-day or of to-morrow, but I hope and believe it will be a mine not only as long as you and I shall live, but during the lives of our children. (Hear, hear.) There are two special matters which will be introduced to your notice to-day—the first is with regard to the inspections of the mine, and the other has reference to the leases. When we first cut the ore, in 1859, the interest of the public was so much stimulated that it was found necessary to pass a resolution that the inspections should be limited to one day in the week, to prevent unnecessary interruption to the business of the mine. That resolution has been in operation from that period to the present time; but our agent will tell you that that does not effectually prevent the interruptions it was intended to do. We have only six working days in the week, and to take away the attention of their surface and underground agent from the business of the mine for one day out of six, in accompanying these inspectors, certainly does not tend to benefit the shareholders, whoever else may be benefited by it. Moreover, Capt. Seccombe gives a detailed report every week. Several friends have entrusted me with their proxies, and have requested me to draw the attention of the meeting to this question, suggesting that the inspections should be limited to once a month. The next matter, the question of the new leases, is a much more agreeable question. It is now 11 years since our sett was first granted—I was one of the original grantees. For eight years the mine was very unprofitable indeed—in fact, it was called in Cornwall a "breeches-pocket mine." Everything was going out and nothing coming in. We have three lords—one represented by trustees, one is our manager, and the other, Mr. Simmons, all of whom desire to recognise our energies in opening the mine for them, and to give us a prolonged term of occupancy. The rate of dues, when the sett was granted, was 1-15th, but the lords have now granted a new lease with a 1-18th dues, which is a very handsome concession. If we had been in other hands they would probably have demanded 1-12th; and if shareholders will take the trouble to calculate, they will find that the company will effect a very considerable saving. This concession is the more satisfactory, when we find that our agent estimates that there is upwards of 95,000*l.* worth of ore, which can be taken away at any moment—it is honourable on the part of the lords, and cannot fail to be beneficial to the adventurers; and I must say that Capt. Seccombe has exerted himself to the utmost to secure every fair and legitimate advantage. We have now the promise of a new lease upon the terms stated for 1200*l.*, which sum does not represent the difference ceded in the dues. It is true South Caradon has had an extension of their lease without a premium, but one of the terms of the lease is, that the lord may demand 1-15th dues, and that mine, be it remembered, is very much deeper. We shall have a new lease for the period of 21 years for the very small sum of 1200*l.*, divisible among three lords. In consequence of some of the leases being granted under powers of a will, the trustees cannot grant a longer period than 21 years, but we have the option, at the end of another year, to get an additional term of four years for rather less than 600*l.* I have lived long enough to see South Caradon a mine for 25 years, and I hope to see East Caradon last as long, and give as good results. In conclusion, I have much pleasure in informing you—although some learned gentlemen would have us believe that our samplings will soon be reduced—that our agent can assure you we are finding as much ore in one month as we are selling in two months, and that he considers with our present sales of ore that he is adding 3000*l.* to our reserves monthly. (Cheers.) With these observations, I will call upon the secretary to read the accounts.

A statement of accounts for the quarter was then read, as follows:—

Balance last audit	£2878	2	7			
To sale of September ores, sold in October ..	3324	15	5			
October ores, sold in November	3710	0	8			
November ores, sold in December	3279	18	11	= £13,192	17	7
September cost	£ 997	15	3			
October cost	857	17	8			
November cost	1174	8	9			
Messrs. West and Sons for new engine	1270	0	0			
Subscription to Bodmin Land School	30	0	0			
Contribution to testimonial to Capt. Seccombe	55	15	0			
Stationery, printing, and stamps	22	1	3			
Miscellaneous expenses	13	2	0			
Amount of lords' dues for three months, on ores raised in Sept., Oct., and Nov.	532	4	11			
Amount required to pay dividend of 1*l.* per share, declared this day	6144	0	0	= 11,095	4	10
Leaving credit balance				£ 2,097	12	9

The following report was also read:—

Jan. 6.—Williams's shaft is sunk about 6 fms. below the 70; the shaftmen have for some time past been engaged in fixing larger pitwork, main rods, &c., requisite for the new engine, which, I am pleased to say, is a very good one, and works admirably.—Caunter Lode: The 70 has been driven on west 8 fms., worth 45*l.* per fathom; and east 10 fms., worth 45*l.* per fm. In the 60 east our progress has been very slow of late, owing to the lode being very wet and troublesome; the whole distance driven since the last meeting being but 3 fms. 2 ft. 6 in. I am pleased to say it is again improving, at present worth 20*l.* per fm. The 50 east, as I anticipated in my last report, has very much improved, now worth full 55*l.* per fm.—New Lode: We have recently intersected this lode in the 70, and in the eastern end it is worth full 30*l.*, and west 30*l.* per fm. The 60 east for some time past has been a very good lode, now worth from 30*l.* to 35*l.* per fm. In the winze sinking below this level it is worth 35*l.* per fm. As soon as these ends are sufficiently advanced we shall resume the driving of the 70 cross-cut south. Fawcett's lode, in the 60 east, is yielding saving work. In the 50 cross-cut north the ground in this direction has, of late, very much improved in character. Seccombe's shaft is sunk a little over 17 fms. below adit, and for the present suspended. As we cannot keep the water until the balance-bobs, flat and main rods, and pitwork are fixed to sink below this depth, we are using every exertion to accomplish this object. Since the last meeting I regret to have observed that every possible influence has been brought to bear to endeavour to induce legitimate holders to dispose of their shares, but I have much pleasure in saying that at no period has the mine ever looked so well as at present, or so likely to pay the shareholders good and continues dividends.—JAMES SECCOMBE.

The CHAIRMAN, in answer to a question, stated that the mine was provided with three steam-engines, two pumping-engines, and a steam-whim, all of which had been paid for. Their power was now ample.

Capt. SECCOMBE said the old engine had been left on the mine, for that part of the sett had not been abandoned. There was a long cross-cut being driven to ascertain the nature of the lodes. He believed that every foot that was driven was productive of ore. With regard to the "primitive granite," he might inform the meeting that when Mr. Salmon accompanied Capt. Thomas Jewell on his visit to this mine, both of them said that the stuff being produced from this cross-cut was "as pretty as could be seen." That old engine was left to cross-cut north, to test the lodes that had not yet been seen. The new engine was taking the work out of Williams's shaft, and a line of flat-rods was being laide from there to Seccombe shaft. When that shaft was cut down they would intersect half-a-dozen lodes. He had no doubt every lode, when found below adit, would prove productive.

The CHAIRMAN said the accounts showed that the committee could properly recommend a dividend of 1*l.* per share, after the payment of which there will be left an undivided profit upon the quarter's operations of 573*l.*

Mr. MUNDEY enquired if the 1200*l.*, included in the quarter's accounts, was the entire payment for the engine?—Capt. SECCOMBE replied that that amount completed the purchase of the engine; and it might be safely stated that 350*l.* or 400*l.* had during the quarter been expended upon new pitwork, &c.

Mr. H. FAWCETT, enquired whether the committee would not have been in a position to recommend a dividend of 25s. per share, had it not been for the additional outlay?

The CHAIRMAN said the shareholders saw the amount of outlay, and the cause of that outlay, and they must draw their own inferences. There was no doubt they had added to the plant, and that addition had been paid for.

Mr. PETER WATSON, seeing that the merchants' bills for November were increased by some 300*l.* or 400*l.*, enquired whether the cost of the pitwork was charged in that month?—Capt. SECCOMBE stated that the pitwork charged in that month amounted to about 180*l.*

Mr. GEACH enquired what was the distance of the 50 east from the boundary?

Capt. SECCOMBE replied about 35 fathoms. He was quite prepared to state—and he challenged contradiction—that at no time had East Caradon looked better than it did at the present time. They were laying open two months' sales in one month's work.

Upon the proposition of the CHAIRMAN, seconded by Mr. W. FAWCETT, the accounts were passed and allowed; and upon the proposition of Mr. BROWNING, seconded by Mr. CUNNINGHAM, a dividend of 1*l.* per share from the profits of the quarter was declared.

Mr. PETER WATSON had understood Capt. Seccombe to say that he expected, when the other lodes where cut in the 50, that they would be equally as productive as the caunter.—Capt. SECCOMBE stated he said that those lodes would be productive.

Mr. PETER WATSON enquired what was the number of the lodes in the sett that had not yet been operated upon?—Capt. SECCOMBE replied that about thirteen had been seen, but that there were others known to exist in the sett which had not yet been seen. For instance, there was the lode in the Caradon Vale, to work which a new engine had recently been erected upon that property; that was north of East Caradon engine-shaft, and they had laid open a lode, in the former working, of 100 fms. in length.

Mr. PETER WATSON had asked that question so that all shareholders might know that there were other lodes than the caunter.

Capt. SECCOMBE said he should be very glad to find any of those lodes as profitable as the caunter, for, instead of buying 150 shares, at 35*l.* per share, by way of supporting the mine against the "bears," he would then give 70*l.* to 100*l.* per share.

Mr. RICE enquired the price that was being paid for driving on the caunter lode?

Captain SECCOMBE did not recollect, but they calculated upon driving about 4 fathoms per month.

Mr. LAVINGTON enquired the distance of the 60 end behind the 50?

Capt. SECCOMBE replied that he should think about 45 fathoms.

Mr. LAVINGTON enquired if there had been any hard ground in the 50?

Capt. SECCOMBE replied in the affirmative.

Mr. LAVINGTON enquired to what value did the lode improve in the 50?

Capt. SECCOMBE replied that the lode had improved to 120*l.* per fathom. It must be understood that, although, according to the would-be learned people, the mine "had been worked too fast," there had not been sunk any sump-winzes in the mine. In the bottom of the 50 a single pick had not been put, and the 60 had not reached this "best deposit of ore ever met in the county."

Mr. LAVINGTON enquired how far the 60 end, upon the new lode, was in advance of the 70 end?—Capt. SECCOMBE replied about 6 or 7 fathoms.

Capt. SECCOMBE, in answer to a question from Mr. Geach, stated that the next level (the 80) upon the new lode would join the caunter. In driving a cross-cut the stratum had been proved to be everything that could be wished, although Messrs. Webb and Geach's inspector, in his report, talked a great deal about "glassy granite." That report went round to the shareholders, and several people sold their shares thereon. They ought, in due justice, to have sent round the contrary report; and the question he would ask Mr. Geach was, whether he was prepared to make up the difference to those shareholders?

Mr. GLYNN said he fully endorsed the remarks of the Chairman with regard to the question of inspection. He was convinced that these frequent inspections materially interfered with the operations at the mine, and, therefore, he would propose that the resolution previously passed upon that point be rescinded, and that in future on only the first Wednesday in each month inspections should be permitted.

Mr. WRISBRIDGE had much pleasure in seconding the proposition.

Mr. GEACH would like to know whether the proposition was strictly legal, for he had always understood that by applying to the Vice-Warden any shareholder could obtain an order to inspect at any time his own property.

The CHAIRMAN said if they had the power to enforce a weekly they had equal power to enforce a monthly inspection; but the question legally could be ascertained by applying to the Vice-Warden for an order.

Mr. LAVINGTON suggested that the weekly inspection day should be altered to that day upon which the agent examined the mine in order to furnish his weekly report. If that plan were adopted there would be no hindrance; but if the inspection day was to be but once a month he thought shareholders would not be doing justice to themselves.

Mr. GEACH thought that if the shareholders passed such a resolution they would only be damaging their own property.

Capt. SECCOMBE said he informed the meeting that some of the inspectors, in their anxiety to send off "a wire," have even forgot to look at some of the levels. Anonymous letters had been sent to all the shareholders with the view of depressing the price of the shares. One agent could see in the eastern part of the mine "glassy granite," and others could see things that no one else had ever seen in the mine. As those adverse reports were sent round to each shareholder, many of whom did not understand the meaning of some of the terms employed, he thought it would be better to pass a resolution to the effect that his (Captain Seccombe's) weekly reports, showing the value of each end, should be sent to the *Mining Journal* for insertion.

Mr. MUNDEY objected to the proposition, upon the ground that a shareholder might between one inspection day and another, wish to have a free and independent opinion. If the mine could be inspected any day in the week the number of inspections, they might depend upon it, would materially fall off. At any rate, he would suggest that no alteration should be made for three months longer. There was one thing that afforded him great pleasure in noticing, and that was that no complaint had been made of the want of civility to the agents by the inspectors. According to the opinion of Captains Dawe, Pascoe, Roberts, and a variety of others, there was no doubt that East Caradon would be a permanently good mine. Capt. Daw, upon a further inspection of the property, saw no reason to alter his opinion, and referred especially to the action of the elvan at the bottom of the mine.

Capt. SECCOMBE: Instead of "glassy granite." He might inform them that the caunter lode in East Caradon was not easily to be understood. Some agents had valued the reserves at 45,000*l.*, others at 50,000*l.*, and others at 60,000*l.*; but he (Capt. Seccombe) estimated them at between 90,000*l.* and 100,000*l.* The lowest estimate, he knew, would be more suitable to certain people. During the past three months the shares had been as low as 33½, but they were now 46 to 47, and likely to go still higher. During the past three months there had never been such a falling off in the mine as to warrant that depression.

Mr. PETER WATSON suggested that when Capt. Seccombe came from underground from his weekly inspection, he should at once state in the record-book the value of each point of operation, by which means the shareholders would be made acquainted with all the facts.

Mr. G. BATTERS was of opinion that if the mine was thrown open for inspection any day in the week, there would not be one-half of the inspections that at present took place.

Mr. W. FAWCETT said that the object of the committee was to have reports correctly given, and that they should have as much publicity as possible. The committee had no objection to the reports, in the first instance, being sent to London, and then forwarded to the office in Salisbury, making the office a secondary consideration.

Mr. PETER WATSON suggested that a copy should be sent to the secretaries of the Stock and Mining Exchanges.

The resolution having been passed, rescinding the present arrangement with regard to weekly inspections, and appointing the first Wednesday in each month for that purpose.

Upon the proposition of Mr. H. FAWCETT, seconded by Mr. PETER WATSON, a resolution was passed to the effect that a copy of Capt. Seccombe's weekly reports should be sent to the secretaries of the Stock and Mining Exchanges.

The CHAIRMAN said the next resolution was with respect to the new leases, which he would propose. It was to the effect that the committee be authorised to take steps to carry out the arrangements for the grant of the new leases.

Mr. WRISBRIDGE having seconded the proposition, it was put and carried unanimously.

Mr. GEACH said, as the business of the meeting had been concluded, he wished to make a few remarks with reference to the allusions made by Capt. Seccombe to Capt. H. James. They (Messrs. Webb and Geach) had no other object in sending Capt. James underground than to ascertain the true state of the mine, on behalf of their clients, as many unfavourable reports had been circulated, as to the appearances of the ground, &c., and, unfortunately, he inspected the mine when the value of the ends had fallen off; a fortnight or three weeks after he again inspected it, when he found some important improvements had taken place. They did not fail in inserting the good report in their Circular, as they had before inserted the other report, and sending it to their clients. They were themselves indirectly suffering from the depression in the price of the shares. At the time the first report was published the shares stood—he was speaking from memory—at something like 38*l.*

A unanimous vote of thanks having been passed to the Chairman, the business of the meeting terminated.

[In our Mr. Geach's remarks at this meeting, in reply to Captain Seccombe's statement that Capt. Henry James's report had damaged the mine, Mr. Geach stated from memory that the shares were 38*l.* at the time that report was issued. On referring however, to our circular of Nov. 29, 1862, which contained our agent's report, we find that the shares were only 34*l.* 5s. to 34*l.* 15s., instead of 38*l.*; and that in the following week they rose to 37*l.*, 38*l.*, instead of falling, as stated by Capt. Seccombe.—WEBB AND GEACH, Finch-lane, London.]

THE DINNER—TESTIMONIAL TO CAPTAIN SECCOMBE.

At the conclusion of the meeting, about 70 shareholders of the East Caradon and Marke Valley Mines dined together. Mr. W. FAWCETT occupied the chair, Mr. R. W. CHILDS the vice-chair.

The usual toasts having been disposed of,

The CHAIRMAN rose to propose the toast of the day. He had great pleasure in being the medium of presenting the handsome testimonial, then upon the table, from the shareholders of the East Caradon and Marke Valley Mines to their friend, Capt. Seccombe. He had known Capt. Seccombe for upwards of 20 years, and had been in continual correspondence with him upon the affairs of these two mines, and he (the Chairman) had no hesitation in saying that for that long period of time he had never known Captain Seccombe propose anything that he had not fully and entirely carried out. He could not do better than read the inscription which was upon this handsome epergne. It was as follows:—"This was presented, on Jan. 7, 1863, to Jas. Seccombe, Esq., of Trenodden, by the shareholders of the Marke Valley and the East Caradon Mining Companies, to record their sense of his great energy, perseverance, and judicious economy in the successful management for many years of these undertakings." He was sure everyone present would endorse—heartily endorse—those sentiments, for there were many in that room who could remember the dark periods in the history of those undertakings. He remembered under that very roof a large number of Marke Valley shares being offered for sale, by public auction, at 7s. per share, and not a single share could be sold. He mentioned that to show the altered position they occupied upon the present occasion, their property, notwithstanding the late depression, being worth in the open market no less than 80,000*l.* With regard to East Caradon, he could remember when those shares were sold and purchased as low as 1s. 6d., and the dark phases through which this undertaking had passed. Therefore, he could endorse every syllable recorded upon this testimonial, with regard to the judgment, energy, and perseverance of Capt. Seccombe in carrying out these undertakings. (Hear, hear.) If any one thing more than another had told to the advantage of the shareholders, it was the great economy that had been practised by Capt. Seccombe throughout the entire career of these undertakings. (Hear, hear.) He could recollect when there was the greatest difficulty in getting their monthly costs, but the judicious manner in which, through the darkest periods of their history, Capt. Seccombe had expended their capital, had enabled them not only to achieve a great success, but in their most adverse days their credit had been equal to any in Cornwall. The present market value of East Caradon was an indisputable evidence of the skill, zeal, and economy practised by Capt. Seccombe, who had never ceased to take the greatest possible care of the property, as an honest and upright man. Having said this much, it only remained for him (the Chairman) to beg Captain Seccombe's acceptance of this handsome testimonial. He was sure every one present would heartily and cordially join with him in wishing Captain and Mrs. Seccombe long life and happiness, in order that they might enjoy the use of the testimonial which he had the honour to present. (Cheers.)

Having been formally presented the testimonial,

Capt. SECCOMBE rose, and was received with the most flattering demonstrations. He begged to return his most heartfelt thanks for this handsome and beautifully-executed testimonial. He felt proud in being in the position to receive such a recognition from the hands of those with whom he had been so long associated, through days of adversity to the present epoch of prosperity. (Cheers.) He could only say that at the commencement of the Marke Valley Mine, some 20 years since, they had to persevere against the most unfavourable reports, and the company would never have been in its present position had it not been for the valuable assistance rendered by Mr. Fawcett from the commencement to the present time. They had not stopped because they had to pass through 20 fathoms of dead ground, nor because they had to pass through 100 fathoms, for they had gone through 150 fathoms of dead ground, and the valuable appearance of the mine was the result of their perseverance. Although the dividend paid to-day was less than upon former occasions, yet he had no doubt that in the course of a few months—perhaps six months—they would see it very much improved. They would then be able to renew operations on Marke's lode at the 100 fathom level, when there would be a valuable course of ore to be taken away. (Hear, hear.) The question had been asked why was not the mine worked upon tribute? The reply to that was, that he did not see the justice of putting into the pockets of tributers that which belonged to the shareholders. Had he adopted that suggestion, that which the shareholders now received would have gone into the pockets of tributers, and no more work would have been done. He was most happy to meet the shareholders under the present favourable circumstances, and he had no doubt that Marke Valley would continue to pay dividends for a long time to come. With regard to East Caradon, they had taken up that mine after it had been abandoned by other parties. He commenced at that part of the mine where he could trace the valuable lodes worked in other properties. After doing that, he commenced driving the adit level south from the south-western point of the former company, when they touched this splendid lode, and brought out this valuable property. (Hear, hear.) He was proud to say that he represented two splendid companies, and that he had a most able supporter in Mr. Fawcett. (Cheers.) In the time when calls were required, Mr. Fawcett was foremost to come forward and express everything which he (Captain Seccombe) proposed. Refering to the present position of East Caradon, he might state that, although the reserves had been by some stated to be low, he, after giving the question the most serious consideration, estimated them at about 95,000*l.*, and he challenged anyone to truthfully give an opinion to the contrary. Where, he would ask, could two such young mines be found in the West? He would fearlessly state that the 100,000*l.* reserve in East Caradon was equal to the 250,000*l.* reserves in the neighbouring mine—that, better than anything else he could state, would show the amount of profit that could be derived from the East Caradon reserves. (Cheers, hear.) Having again returned his most sincere thanks for the kind and generous feeling evinced towards him, he hoped they would all meet for many years to come, to congratulate the other upon the continued prosperity of the Marke Valley and East Caradon Mines. (Cheers.)

The healths of the Chairman and Vice-chairman were drunk, and responded to in appropriate terms; as were also the healths of Messrs. Norton and Harding, the pursers. The next toast, "The Lords of the Two Mines," was acknowledged by Capt. SECCOMBE. "The Progress of the Stock and Mining Exchanges," was responded to by Mr. MUNDEY, in a speech of eloquence and point. "The Neighbouring Mines," was responded to by Mr. GEACH.

Mr. BATTERS drew the attention of the assemblage to the fact that three months since it was suggested that some recognition should be made of the valuable and indefatigable services rendered by their valuable and estimable Chairman, Mr. Fawcett, who had been foremost in the ranks in bringing these mines to the proud position they now occupied. Having acknowledged by a suitable testimonial the services of their esteemed and able executive at the mine, he (Mr. Batters) was sure they would all regard it as a great honour and pleasure in being allowed the privilege to subscribe to some similar testimonial to their Chairman (Mr. Fawcett), for had it not been for the great assistance that worthy chief had rendered, and the extreme confidence he had had in these undertakings, they would never have been in the position they stood at the present moment. He (Mr. Batters) had pleasure in reiterating the sentiments expressed at the last meeting, and suggesting that this testimonial should be at once set on foot; and, inasmuch as there were many in the fulness of their hearts would give considerable sums, he would suggest that no one should have the privilege of subscribing more than one guinea, because he felt convinced that the worthy recipient of this testimonial would value to a much greater extent the number of the subscriptions than the largeness of the amount subscribed. (Hear, hear.)

The VICE-CHAIRMAN said the only thing he feared was that the adoption of the suggestion made would not adequately represent the feelings of the shareholders towards their esteemed Chairman, Mr. Fawcett.

Each of the guests present at once handed in their subscriptions.

The testimonial presented to Capt. Seccombe, which consisted of an elaborately-executed silver epergne, of the value of 100 guineas, having been passed round the room, the assemblage dispersed.

ORIGIN OF PETROLEUM.—In America, an oil has been for many years collected by the Seneca Indians for medical purposes, chiefly as a stimulating embrocation; but the first discovery of a large supply was made in 1859, when a vein was opened in boring in search of a salt spring. The supply was at first apparently inexhaustible; one well alone is stated to have yielded 7000 gallons per day, and another to have discharged 100 gallons a minute. A large part of that which was first produced ran to waste, from the impossibility of procuring vessels to contain it; so that, eventually, the whole district became odorous with oil, the very ground being sticky with it, and every object was contaminated. It was said that the oil was everywhere; that it was tasted in the beer, and flavoured even the whiskey; that it might be smelt in the bread, and eaten in the bacon; that the very sheets were oily; that the water given you to wash in had a film on the surface, and that the towel left an oily deposit on your face.—*Oil Trade Review.*

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

There has been a very considerable improvement in the Mining Share Market during the past week, and from the transactions completed, and the enquiry made for leading stocks, there is evidently an improved market in prospective. The class of shares dealt in, and sought for, are of that kind which a discriminating public would reasonably embark in for a permanent investment, and, from present appearances, likely to become highly lucrative. The changes which have taken place have not been of that violent character previously noticed, and the advances are apparently founded upon the merits of the respective mines, and in such cases it is generally found to be more consistent and settled. Several mines have had improvements reported, and advances have naturally followed; while in other cases shares have risen where there is no reason for the advance, consequently a decline must necessarily follow. WHEAL SETONS have been, and continue in, considerable demand, in consequence of the great improvements which are reported to have taken place; some fluctuations have occurred, but the shares well maintain their rise, and are likely to, from their scarcity.——WEST SETON and NEW SETON have also been in demand.——GREAT SOUTH TOLGUS, SOUTH TOLGUS, GRAMBLER AND ST. AUBYN, COOK'S KITCHEN, EAST BASSET, and a few others, have been sought for.——Business has been done in TINCROFT, EAST CARN BREA, STRAY PARE, CARGOLL, WHEAL FRANCES, SOUTH FRANCES, &c., without any advance in price; whilst EAST GRENVILLE, WHEAL GRENVILLE, WHEAL UNION, WHEAL UNY, &c., have shown more firmness in the quotations given.

NORTH ROSKEARS have been in great request, and numerous transactions followed at advanced rates.——NORTH TRESKERBY, NORTH CROFTY, and NORTH DOWNS are rather firmer, and largely dealt in.——HARRIETTS have experienced a great rise, and it is stated that the mine has considerably improved, although the reports do not confirm the rumour.——EAST ROSEWARNE has improved, and that very considerably, and the prices very likely to be transferred from one to the other.——PENDEEN, SOUTH CROFTY, GREAT WHEAL FORTUNE, BASSET AND GRYLLS, WHEAL GRYLLS, and TOLVADDEN have been steadily sought for. Mines in the Caradon district have, as usual, been well supported.——EAST CARADON continues in good demand, at advanced rates.——MARKE VALLEYS have been offered more freely.——LUDCOTTS have been largely dealt in, but without any very material rise.——HERODSFOOT are in request.——WEST CARADON, MARY ANN, and TRELAWNY have changed hands, and appear firmer. ——CREBORS have experienced a rapid rise and as sudden a fall——EAST RUSSELLS have been in request at advanced rates.——LADY BERTHA, SORTRIDGE, &c., remain much the same as last week. The quarterly meetings of EAST CARADON, MARKE VALLEY, WEST ROSE DOWN, and CARN CAMBORNE were held at Salisbury on the 7th, the particulars of which will be found in the reports of meetings in this day's Journal.——EAST ROSEWARNE continues to look well in every point of operation, and improving in depth. The shaft is of the same value as last reported, and the 55 west is worth full 40*l.* per fm. There are other lodes which are looking remarkably well, and according to an inspection of yesterday greatly improved. The 115 tons sold yesterday (Thursday) realised 1104*l.*, which will leave a profit for the two months of 200*l.* or more.——HARRIETT is looking much the same as last week, without any alteration in the 115, or the winze sinking under the 100. Alexander's lode in the shaft is worth 15*l.*, and the adit end 8*l.* per fm.

COOK'S KITCHEN.—The account-day, which should have been held about the present time, has been postponed until Feb. 25, for the purpose of completing the matters under consideration between this mine and Tincroft, and to enable the shareholders generally, and especially distant proprietors, an opportunity of forming some opinion, or fair estimate, of the positions of the two mines, showing the extent of levels driving up to and through the boundary into Tincroft. There is no doubt but the most satisfactory arangements will be arrived at between the two mines, when the vast extent of rich tin ground will be taken away with facility and mutual advantage. The report of the mine is of more than ordinary character, and will be read by the shareholders with the most pleasing satisfaction.

EAST TRESKERBY: The 55 east continues to look very encouraging, carrying rich stones of lead, whilst the water is percolating more freely from the end. The lode in the 40 east is orey in the end, and the 40 west is also improving, with several small orey branches. The 40 cross-cut north is progressing satisfactorily, being more congenial for ore than for some time past.

GREAT SOUTH TOLGUS: The lode at Lyle's shaft is now worth 80*l.* per fm. for tin; it continues large, and is looking well. There is no other change to notice in the different points of operations.

WHEAL SETON: North Caunter: From the 150, at Tilly's shaft, they are cross-cutting north and south, to intersect the lodes, in hard ground, but highly indicative of good results in this locality. The 140 east is in a large productive lode for both tin and copper, opening good tribute ground. The lode in the 140 west is large, producing good stones of copper and tin. In the 140, west of the eastern junction, the lode is 7 ft. wide, yielding 3 tons per fm. The sump-winze below the 140, is yielding 15 tons per fm., for the part carried—9 ft. long. The winze below the 140, opposite Tilly's shaft, is yielding 9 tons per fm., for the length. The 130, west of Tilly's, is worth 2 tons; lode 5 ft. wide. The 120 west is 3½ ft. wide, indicative of improvement. The 110 west is yielding 10 tons per fm., having passed through several fathoms of rich ore ground, which can be taken away at a low cost; this end is near the boundary. The stopes in back of the 140 are yielding large quantities of ore.—Middle Lode: The 110 west is worth 1 ton per fathom, and the winze sinking below is yielding 7 tons per fm.—South Caunter: The 130 west is in a very promising lode, producing stones of ore.—Prideaux's Lode: The winze sinking below the 140 west is yielding 8 tons per fm. The general appearance of the mine is remarkably good for a permanent paying one. In and about the 140 a great many fathoms of rich orey ground have been passed through, and, from the character of the ground in the 150 cross-cut, there is every reason to calculate on intersecting lodes with deposits of good and lasting courses of ore. (Since the above was received a very considerable improvement has taken place in two or three important points.)

TREWORLIS is reported to have improved in the bottom level. There has been a slight falling off in value, in consequence of the lode becoming less productive, but a favourable change is apparent in the respective ends, and a very considerable improvement may be expected, as they are approaching the orey ground gone down from the levels above.

CARNYORTH is reported to have improved in the 76 and 88, west of the flat-rod shaft, where they have a good lode for tin, and opening excellent tribute ground. They have resumed sinking the engine-shaft 50 fms. below the adit level, where they have an important discovery of tin. This step is stated to have been frequently recommended by some of the late management, but invariably over-ruled by others.

WHEAL PROSPER (Breage): The engine-shaft is completed to the 50. The 50 east is worth 8*l.* to 10*l.* per fm. No lode taken down in the 50 west; the 40 west is looking well. The 40, east of Forth-cue, is worth 6*l.* per fm., and looking highly promising for improvement. All other places continue much the same.

BASSET AND GRYLLS continues to look remarkably well, and is represented to have improved since the meeting. The agents' report may be considered on the safe side, for several of the ends and other productive places have been estimated at greater value. The mine is opening out more than ordinarily.——WHEAL TREMAYNE is reported to look very encouraging in several important points, particularly in the 113 and 123 going east, where there are several places varying in value from 26*l.* to 12*l.* per fm. for tin, and according to present appearances likely to continue. JAMES LANE.

From Mr. EDWARD COOKE:—A very large amount of business has been done during the week, and a considerable advance taken place in the price of several mines, including NORTH ROSKEAR, WHEAL HARRIETT, EAST CARADON, EAST ROSEWARNE, WHEAL SETON, &c., and there are other mines that cannot fail to take a better position in the market ere long, and among them will be found CARADON UNITED, EAST CHIVERTON, WORVAS DOWNS, EAST GRYLLS, NEW SOUTH CARADON, CARADON CONSOLS, &c. The rise in WHEAL HARRIETT shares has been caused by the continued prosperity of the mine. The public cannot surely be aware of the fact that this mine will soon be in the Dividend List. Profits to the extent of 400*l.* or 500*l.* per month, according to the agent's own statement, will be made from the tin ground already discovered. When the shares are 5*l.* to 6*l.* they will, probably, be more sought after. At CARADON CONSOLS a very important change has taken place in the shaft on the main lode; and, although the lode is not yet rich, it contains good stones of yellow ore, which is indicative of something very good in depth. This mine adjoins West Caradon, that has given such large profits; and, being in whole or virgin ground, renders it a speculation of no ordinary character. The price of the shares is now about 14 to 15. There are only 914 shares, and they are well held by parties in Liskeard, who look forward to its being some day equally as valuable as West and South Caradon; and in the event of a good course of ore being met with the price of the shares would go very high, and of this there are great probabilities. The sale of the LUDCOTT and WREY CONSOLS ores is likely to very much exceed the estimate formed, and will, probably, realise above 4500*l.*, or about 7000*l.* for the quarter. According to the present rate of dividends, the shares are worth more than 15*l.*

The excitement caused by the large speculative dealings that are taking place in a few high-price mines just now, causes many very legitimate concerns to be almost entirely neglected, but this will only last for a season. In the mean time, it will be wise on the part of the public to take advantage of this period, and buy into a few good mines while the shares may be had at a comparatively low price. NEW SOUTH CARADON, although at present not much noticed, will before long attract more attention. Several lodes have been met with in clearing up the adit; and one of which, named No. 7 lode, is gradually improving. It should not be forgotten that this sett contains the lodes of West and South Caradon, and may some day be an important concern, while the shares are but about 15s. each, and free from debt of any kind beyond the current cost, which is very trifling, owing to there being no steam-power required, as there is ample water-power for all purposes. CARADON UNITED, although not exactly in the same district, is one of the best speculations in Cornwall, and the shares at present price are very cheap, when the extraordinary chances of success are considered. Price of the shares, 20s. paid, 1¾ to 2.

P.S.—The actual profit for the past three months in LUDCOTT AND WREY CONSOLS is 2517*l.* 4s., besides a parcel of lead sold on the 7th, for which credit is not taken. There is not a lead mine in the county doing so well.

From Mr. GEORGE BATTERS:—Considering that it is the first week of the new year, the business of the market for mining shares must be pronounced very active. The actual number of transactions have been numerous, and in the aggregate large in amount even for ordinary times. The new year opens auspiciously on mining, and a favourable feature to notice is that the attention of investors in this class of property is being directed to sound and legitimate undertakings, such as NORTH ROSKEAR, SOUTH CARADON, EAST CARADON, COOK'S KITCHEN, TINCROFT, WHEAL SETON, NORTH CROFTY, WHEAL UNION, &c., ignoring ephemeral schemes, got up for the special behoof of promoters of companies in outlying districts, and gold mining bubbles, traps which only catch the veriest tyros in their first essays in the field of mining speculation, but which, nevertheless, produce misery and ruin to large numbers, and cannot be sufficiently denounced. Money continues in full supply in Lombard-street, at a trifle under the Bank minimum, and on the Stock Exchange at about 2 per cent. Consols have risen in the week ⅜ per cent. Railways have been in good demand, and have improved, especially the Indian lines. Bank and Miscellaneous shares have been in fair demand, at enhanced quotations. No material change has taken place in the Metal Market, the tendency is towards improvement.

In Mining Shares the chief dealings have been in NORTH ROSKEAR, WHEAL SETON, NEW SETON, EAST CARADON, GREAT SOUTH TOLGUS, COCK'S KITCHEN, EAST CARN BREA, WHEAL UNION, NORTH CROFTY, &c. NORTH ROSKEARS have been largely bought for investment, and shares have steadily risen, closing at 59½, 60, with a strong upward tendency: this property is divided into only 700 shares, and bids fair to be one of the most important and lasting in Cornwall. During the week the mine has been inspected by Capt. Juleffe, of Wheal Basset, who values the lode in the winze sinking under the 184 at 80*l.* per fathom; the winze sinking under the 174, 21 fms. in advance of that in the 184, at 80*l.* per fathom; the 184 fm. level end at 50*l.* per fathom; in a day or two the shaft will be set to sink under the 184 in a course of ore worth 120*l.* per fathom; an improvement has also taken place in Reeves's lode, at the driving towards Wheal Seton, both for tin and copper. NORTH CROFTYS closed at 5, 5⅛; the 130 east of the slide is improving, there are several points of importance likely to come off within a week or two, the returns will also be greatly increased when the shaft is holed to the 170, which is now nearly through. WHEAL UNIONS are steady at 5⅞, 6; the lode in the flat-rod shaft is 5 feet wide, of the most promising character, and the lode in the winze sinking below the 18 fm. level is 9 feet wide, a mass of gossan, mixed with black ore. SOUTH CARN BREA, 2¼, 2⅜; the lode in the flat-rod shaft, sinking below the 98 fm. level, is worth for tin 30*l.* per fathom. GREAT SOUTH TOLGUS, 6⅞, 7; the lode in Lyle's shaft is scarcely so good as last week, valued at 80*l.* per fathom. EAST CARN BREA, 11⅝ to 11⅝; the middle lode at the 60 fm. level has improved to 3 tons of rich ore per fathom; the 50 west on the same lode is worth 1 ton; shares are very scarce for delivery. EAST CARADONS have been largely dealt in, closing at 45¾ to 46¼ ex div.; at the meeting held in Salisbury, on Wednesday, a dividend of 20s. per share was declared. The report was one of the most favourable ever received from the mine; the new lode at the 70 is worth 30*l.* per fm., east and west respectively; the 50 east on the caunter, 55*l.*; the 60 east, 20*l.*; the 70 east, 45*l.*; and west, 40*l.* per fathom. WHEAL SETONS have been eagerly bought up at 235 to 240; the course of ore in the winze, sinking under the 140 fm. level, is worth 25 tons per fathom. WEST BASSET, 13½ to 14; no material change has taken place in the workings of the mine. WHEAL UNYS are 7 to 7¼. EAST GRENVILLES have risen from 50s. to 52s. 6d. WHEAL GRENVILLES from 5 to 5¼. EAST BASSETS are enquired for at 54 to 55. SOUTH CARADONS are 390 to 395. DEVON GREAT CONSOLS at 505 to 510, and in demand. MARKE VALLEYS are 8⅜ to 8⅝; the dividend at the meeting held in Salisbury was 2s. 6d. per share; the prospects are good, though the present profits are not large. WEST TOLGUS, 55 to 56; the mine is looking well.

In Tin Mines a large business has been done. COOK'S KITCHEN are at enhanced quotations, closing at 32 to 33; an improvement has taken place in the mine. TINCROFTS, 13¼ to 13½. HARRIETTS have risen from 3¼ to 3¾. WHEAL GRYLLS is opening up well. EAST MARGARET is opening up well, and likely to enter the Dividend List this year; the mine is divided into 1024 shares, and can be had at a low figure. WORVAS DOWNS is looking better SITHNEY AND CARNMEAL shares are again enquired for at 2½ to 3; there are important points likely to come off favourably in the course of a few weeks in this mine. In Lead Mines, BRYN GWIOGS have risen from 32 to 33; the lode in the 75 west is worth 2 tons per fathom; the lode in the shaft has also improved; the sale of ore for the month, on Thursday last, was 60 tons, leaving a good profit. LONG RAKE are also in request, at 15½ to 16½; BILLINS, 16 to 17; HERODSFOOT, 48 to 50; TRELAWNY, 17 to 17½; MARY ANN, 15 to 15½. In Foreign Mines, SANTA BARBARAS have recovered to ⅞. ⅝ prem. At the final close of the market, NORTH ROSKEARS are 59½ to 60, and are likely to see a very high figure.

COPPER MINING IN SOUTH AUSTRALIA.

The following passages are taken from the *South Australian Advertiser* of Oct. 25:—

With respect to our mines, they are more than ever encouraging. We have elsewhere given particulars relative to the Burra, the Moonta, the mines of the Far North, and the very promising silver-lead mines of Cape Jervis. The mineral interest is outstripping all others in its rapid development. The Moonta, after repaying all disbursements, has declared a dividend of 10*l.* per share; and the other mines, on Yorke's Peninsula are also improving. In the North, the Nuccaleena (belonging to the Great Northern Mining Company) has much improved, and the mines of the Yudanamutana Mining Company in each successive report show an improvement. Smelting work are being erected at the Wheal Blinman, one of the company's mines. The North Rhine promises fair to repay the shareholders by profitable workings; and the older mines—the Burra and Kapunda—continue to keep their good name.

WHEAL BLINMAN, OCT. 11.—This mine, the property of the Yudanamutana Mining Company, and which has been worked but little more than three months, is yielding large quantities of copper ore of the richest quality. The lode has been traced nearly 10 fms. in depth, having a dip westward of about 15° from the perpendicular, or 18 in. in the fathom. The average width of the lode is 6 ft. of solid ore, consisting of a peculiar grey oxide, similar in appearance to very fine regulus. We should have judged the best of the ore to be worth 65 per cent. of copper, but are informed that it is considerably richer even than that. It is different in appearance from ordinary specimens, having a peculiar metallic lustre, and being like a combination of red oxide and grey ore. There are also specks of the finest yellow ore, called "semi-metal," interspersed through the lode; here and there beautiful and rich crystals of green and blue carbonate are also found. One hundred and twenty tons of the richest ore have been sent to Port Augusta, and above 100 tons of second-class ore, worth 35 per cent. of copper. About 300 tons of inferior ore, worth about 15 per cent., are also about to be dressed, preparatory to being reduced to regulus at the mine. No. 2 shaft is about 8 fms. south of No. 1, the same lode has been cut in this shaft, where it is from 8 to 10 ft. wide; the ore raised is of similar quality to that in the other shaft, and the quantity raised is about 100 tons of first and second quality, and 150 tons to be smelted. About 18 fms. further south No. 3 workings are going on, and which, at about 3 fms. below the surface, have produced 5 tons of the finest ore, and about 10 tons for smelting. About 10 fms. still farther south, on the same lode, a shaft has been sunk 4 fms., from which about 5 tons of second quality ore have been raised, and a few tons have also to be reduced to regulus. About 20 fms. north of No. 1 shaft another shaft (No. 5) has been sunk 4 fms. through a good gossan lode, containing ore of first and second quality: 50 tons of ore of all qualities have been raised from this shaft, and 20 fms. further north No. 4 shaft is sunk to a depth of 10 fms. through a good ore-bearing lode, from 3 to 4 ft. wide. About 50 men and boys are employed on this mine. Wheal Blinman is pleasantly situated amongst low hills, about three miles from Angorigena, the station of Mr. H. C. Swan. At present there is good grass in the immediate neighbourhood, as indeed there is wherever grass grows in the North. We have to-day ridden over some fine grass country on Messrs. Chambers and Finke's run, 10 miles from here, at Mooloolooo, and there is splendid feed the greater part of the road all the way from Port Augusta—about 130 miles. A new road is about to be opened from this mine through the Brachina Creek, leading on to the Western Plains, and which will save a distance of 25 or 30 miles. The whole of the country in this neighbourhood is what miners call good "settled" country, and is well situated for feed and water, there being several fine springs within a few miles. A magnificent block of ore, weighing 2¼ tons, and estimated to average throughout 40 per cent. of copper, has just arrived at Port Augusta from this mine. A well has been sunk to a depth of 20 fms. in the bed of the creek without reaching water, so that there is every prospect of the mine continuing dry to a depth of 40 fms. Several substantial buildings of pine have been erected on the mine, and a Post-Office is established here, through which about 40 letters per week are transmitted to Adelaide and other places.

OCT. 15.—In my last I gave a brief description of the Blinman Mines, and I have not yet left them, having made this place my head quarters for the past week, and where I am now waiting in hope of getting letters by the mail. I have been several miles round to inspect various mineral claims, with some of which I have been pleased, but with others, I must say, the feeling excited has been one of disgust. I do not wish to enlarge on these matters, or to particularise, and for some reasons it would, perhaps, be hardly fair that I should express an opinion on claims not yet brought before the public notice; but I do not think there will be anything unfair for me in a private way, and on application, when I return to Adelaide, to give my opinion to such parties as may desire it, being interested in mineral claims in the North. There can be no doubt that there are very large mineral deposits in the North, but far too many places are, to use a colonial phrase, "cracked up" as rich mines, which neither are nor are ever likely to prove rich, if, indeed, they are ever likely to become worthy of the name of mines at all. Persons in Adelaide should exercise the greatest caution before investing in claims, even though they may have seen some specimens of ore from the locality, and received a favourable report from a mining captain. I have seen claims which have been extolled as exceedingly rich and valuable, and a share in which has been estimated as worth some thousands sterling, and which when they came to be inspected presented no appearance of a lode, and only the most meagre stains of copper. In addition to these drawbacks, perhaps the place is in an almost inaccessible situation, unapproachable even on horseback, much more by drays, or may be miles from water. I confess I speak generally, and have no one particular claim in view while I thus write, and which combines in itself each and all of the objections I have named. As I said before there are, no doubt, large deposits of copper in the North, but none even of the real mines have yet been developed to any great depth. I believe the deepest shaft scarcely exceeds 20 fms., and this in Cornwall would be called mere surfacing. While on the one hand many persons are over sanguine if they see a stain of copper on the surface, on the other hand I think many are too easily discouraged if they do not at once find a rich mine by scratching to a depth of only a few feet. I should not be surprised if some mines, where several hundreds or even thousands of pounds have been expended, and which have since been abandoned, are again worked when mining is more extensively carried on in the North, and that ultimately they may turn out valuable mines. But in all legitimate mining operations the account should be laid with a large outlay, so as properly to prove the property, and if that were done the mineral resources of this colony would be better developed, and the country would derive that benefit from her mineral wealth which she ought to enjoy.

This very morning the great lode at the Blinman has been further exposed, and is a splendid sight. Masses of solid ore of 2 or 3 tons weight, and averaging throughout above 60 per cent. of copper, are laid bare. The ore is like rough copper which has been twice through the smelting-furnace. Besides this, there is rich green carbonate, red oxide, a little black ore, and fine gossan in the lode, and several hundred tons of ore are at sight. We start this morning (Wednesday, October 18) *en route* for Yudanamutana Mines, examining the Mount Rose, Apex-hill, and other mines on our way, and afterwards the Sir Dominick Daly, Welcome, and other mines, taking the Nuccaleena on our way back. I am very glad to learn that the lode of black ore at the Nuccaleena Mine, belonging to the Great Northern, and which was cut some three months or more since, has been again cut at a greater depth at the engine-shaft. I do not know the exact depth, but belive it to be above 14 fms. You can probably ascertain further particulars at the office. I will write again when I visit that mine, in about three weeks' time.

WORTING MINING COMPANY.—The Bremer Mine is going on as usual; the shaft has been resumed, the lode producing good stones of rich yellow ore. The quantity of ore raised and dressed during the month has not diminished, and drivings are going on southward to gain under the old working, where the largest quantity of ore was found formerly, with every prospect of realisation; in fact, everything—machinery, dressing, and smelting—goes on so steadily that I have difficulty in framing a report for this month. A fatal accident occurred during the month from a man losing his hold of the ladder, otherwise everything is going on well.

NEW ZEALAND.—His Excellency Sir George Grey, the Governor, has been pleased to place Mr. Albert J. Allom on the Commission of the Peace for the colony. Mr. Allom was sent out about 18 months ago by the Great Barrier Company, as their general manager, and the above compliment must be pleasing and satisfactory to them.

EXTRAORDINARY SILVER MINE.—In the Geological Museum there is a lump of silver—about as much as would make 40s.—which has been taken from the stomach of a mule in Mexico. It appears to be a common occurrence to find quantities of silver in the stomach and intestines of the mules working in the Mexican silver mines, and its presence is accounted for by the mules eating mud, which contains much silver, for the purpose of obtaining the salt which is mixed up with it also. The silver is said to accumulate to a considerable extent without proving injurious.

COPPER PAINT.—The Abbé Moigno describes in *Cosmos* a new pigment used in the workshops of M. Oudry, of Auteuil. Its foundation depends upon the electro-deposit of copper in an impalpable powder, which being combined with benzine, can be employed upon any surface as a paint. It possesses an agreeable lustre, and will take bronze tints by the usual chemical means. By reducing the quantity of copper, and adding bases of lead, zinc, or other metals, M. Oudry obtains a series of paints said to possess great advantages over those prepared with turpentine and ordinary oils.

Mining Correspondence.

BRITISH MINES.

BAGTOR.—Wm. Hosking, Jan. 8: We are making very satisfactory progress at this mine with our underground operations, and I am happy in being able to state that the Prosper lode continues very productive in the shaft sinking below the adit level. This appears to be a strong and continuous course of tin, from which we are raising splendid work. We are pushing down the shaft with all possible dispatch for a 10 fathom level, where, if the lode continues as rich as it now is, we shall open up such ground as will enable us to make substantial returns. We are also making strenuous efforts to get the shaft on Quick Beam lode down for a 12 under adit, where, from the present mineralised state of the lode, and the general congenial nature of the ground, I expect favourable results. Our carpenters are engaged with the run of flat-rods from the engine-wheel, which, when completed, will greatly facilitate the above-named development. My conviction that we have here a very rich piece of mineral ground is almost daily strengthened, and I feel confident that patience, backed by unremitting energy, will soon effect a realisation.

BALDWIN MINES (Isle of Man).—M. Grose, Dec. 30: In compliance with your request, I have carefully examined the Baldwin Mine. I find the geological formation of the locality is primary clay and schist, striated in mineral lodes, bearing lead ore, which yields, from an assay I have lately made, from 70 to 80 per cent. for lead, and about 35 ozs. of silver to the ton of ore. On the east side of Baldwin River there are three distinct powerful lodes, running in an east and west direction, and are evidently converging at one point about midway in the valley, at a short distance to the west of the present workings. It is invariably a rule in mineral districts that where lodes (such as these) unite or form a junction, there is always found a great deposit of mineral; I shall now describe them as Nos. 1, 2, and 3. About 18 years ago an adit was driven some considerable distance on No. 1 lode, by the Foxdale Mining Company; a winze was also sunk 10 fms. under the bed of the river, and the indications throughout these workings were considered by experienced mining men as most encouraging, but, unfortunately through the sudden influx of water, the mine was obliged to be abandoned before the trial was completed, but with the intention of erecting a water-wheel for further developing this lode. No. 2, or middle lode, is one of great importance. It is composed of flookan, soft sugar spar, and quartz, which is very congenial for ore, and about 2 feet wide of lead and jack; in fact, in looking at every favourable indication, I scarcely ever saw a more promising back so near the surface, and it only speaks for what may be expected at a greater depth. A winze is now commenced on the course of this lode, and it is the intention to sink it at a sufficient depth to intersect No. 3 lode, which underlie is in that direction. In looking at every feature connected with these lodes, any mining man would come to the conclusion that great deposits of ore will, undoubtedly, be met with. I may as well state that when the Foxdale Mining Company held this district as a portion of their grant, the No. 3 lode was not discovered, and it was only recently found by means of a flood of water washing down a portion of the embankment. I consider this property possesses facilities that few can boast of in this island. It is mountainous, and intersected with numerous valleys and streams, affording advantages for adit level mining, the cheapest of all mining work. At all seasons there is ample water-power for all sorts of mining machinery, the Baldwin River alone giving a power equal to 100 horses, thus obviating the great expense of steam machinery, and its consequent continuous outlay. There is another important feature connected with this mine, there being excellent roads close to the place, and the shipping port of Douglas within four miles. Believing, as I do, that the mineral indications of this property are promising to a high degree, and that the conditions on which it is obtained are most liberal, together with other advantages set forth, I am fully prepared to say that, with a moderate capital, and a little judicious management, it will soon prove a good dividend-paying mine.

— W. Tupper, Jan. 2: It appears that at the date of my last report (December 4), we had fully struck into the works extending from the inner sump, the level to a great extent being full of rubbish, and other parts having fallen in, the rubbish we have had to send to bank; we are now making repairs to the level, which we expect will be completed next week. The 5 fathom level is driven east on the lode, from the main shaft, 25 fms.; the lode in the end is 3 ft. wide, beautifully composed of soft spar, cabonate of lime, with stones of blende, intermixed with spots of lead ore—a very kindly lode; indeed it is quite evident that we only want a deeper hold on the vein to make a rich and valuable mine. The ground is all standing in the back of the level, but I am not able to report on the character and quality of the lode here until we have put a stope over the bottom of it.

BEDFORD CONSOLS.—J. Mitchell, Jan. 8: On Saturday last the middle adit level was set to drive east, on the south part of the north lode, by six men, at 6*l.* per fathom, 2 fms. stent; our object is to push on to the slide as fast as possible, and the men are making fair progress. The lode continues much the same as for some time past.

BEDFORD UNITED.—James Phillips, Jan. 6: The lode in the 115 west is 18 in. wide, producing saving work. Lang's stopes, in this level, are worth 4 tons of ore per fathom. The stopes in the 103 west are worth 3½ tons per fathom. The lode in the 90 west is 18 in. wide, producing good stones of ore. Woolcock's stopes, in this level, are worth 3½ tons per fm. The lode in the 58 east is unproductive. The stopes in this level are yielding 2 tons per fm. No change has taken place in the 47 west, on the south lode. The stopes in the 35 east are worth 1½ ton per fm.

BILLINS.—F. Evans, Jan. 7: The late floods have prevented us from getting the water out of the bottom level, and we must wait the erection of the engine for that purpose. We have been driving on the flat, &c., which looks promising to produce lead ores.

BOSCUNDLE.—J. Vivian, Jan. 1: We are still extending our 26, east from Morcom's shaft, and have driven about 15 fms. since last reported. We have been driving by the side of the lode on a branch which contains a little black copper ore. We have intersected two slides, and so soon as we get into settled ground we hope to cut through the lode. The ground appears to be very congenial for copper ore.

BOSWORTHEN.—J. Daniel, Jan. 8: We have cleared the deep adit level so as to get into the end, and have set the men to-day to clear and secure the level, so as to resumh the driving; this level is extended west from Harvey's shaft about 12 fms.; for that distance the lode is from 1 to 3 feet wide; in the present end it is from 12 to 18 in. wide, and seems to be opening out larger; shall be able next week to speak of its character. The clearing of the shallow adit will now engage our attention. At Corn Brane we have been colaring up the shaft; as we get down the lode it is more settled, and is improving in size and appearance.

BRONFLOYD UNITED.—J. Lester, Jan. 8: Settings for January: The 27 to drive west by four men, at 70s. per fathom; lode worth from 15 to 20 cwts. per fathom. To stopes backs of same by four men, at 40s. per fathom; lode much the same as level. The 40 to drive west of winze by eight men, at 80s. per fathom; lode yielding from 25 to 30 cwts. of ore per fathom. To stope back of same by six men, at 60s. per fm.; lode yielding same as level. The cross-cut from deep adit, 60 fms. west of boundary, by two men, at 80s. per fathom, 2 fathoms, or cut through the lode, yielding at present copper and lead ore, but not sufficient to value.

In consequence of the brilliant character of the reports from East Bronfloyd from week to week, we have opened a cross-cut exactly 6 fathoms west of their engine-shaft, at a point about 10 fms. below its present depth. We have cut 3 fms. through an entirely unproductive lode, and have suspended it, being now more than ever convinced that the surrender of the ground (now held by the East Bronfloyd Company) about four years since by this company was justified by its utter worthlessness; besides, the underlie of the lode will presently take it into Brwn-vy-reg sett. On Tuesday we shipped 50 tons 5 cwts. of lead ore, sold last week to Messrs. Sims, Williyams, and Co., at 14*l.* 1s., and I am happy to say we are getting on well with dressing for another sampling. We are waiting for castings from foundry for finishing drawing-machine.

BRYN GWIOG.—F. Evans, Jan. 6: The 75 west will produce about 2 tons per fm.; and the sump sinking on this end, from the 66, will produce ½ ton of lead ore per fm. We are rising in back of the 75 west, to cut, as we think, a run of ore. We are also rising in back of the 75 east for a similar purpose. The stopes in the roof of this level and below are improved for lead ore, and the men earning good wages, 3*l.* 10s. and 4*l.* per month. The different pitches in back of the 66 are not looking so well, the price per ton being from 5*l.* to 6*l.* In the 50 west we are sinking a sump to try to communicate to the old workings. On the whole, the mine is looking pretty well. The 75, and bottom part of the mine, having greatly improved during the past month. We sampled today 60 tons of good quality ore, for sale on Thursday next.

BRYNTAIL.—J. Roach, Jan. 8: We have sunk through the gritstone accompaning the great cross-course, in the new engine-shaft, and have penetrated clay-slate in the eastern end of it. I, therefore, believe we shall now make rapid progress. The deep adit is cleared and secured as far as the cross-cut leading to the 15, above adit. When we intersect the lode at the levels proposed, no doubt we shall find it very productive for lead ore; indications are highly in favour of it. The monthly costs are light, and a short time will suffice to determine the future of the mine. I fully believe the present deep operations now being carried out will lead to good results, and that a profitable and permanent mine will be established.

CAMBORNE CONSOLS.—W. Roberts, Jan. 7: The following bargains were set on Friday last:—The 50 cross-cut to drive north by two men, at 10*l.* 10s. per fm. The 50 east, on the caunter, by four men, at 6*l.* per fm.; in this end the lode is 1 ft. wide, producing very good stones of ore. The 20 to drive west on the north lode by four men, at 8*l.* per fm.; the lode in this end is looking better than for some time past, being 1 ft. wide, with stones of good ore.

CARADON CONSOLS.—W. Rich, Jan. 6: The lode in the engine-shaft, sinking below the 68, has a better appearance than of late; it is composed of peach, fluor-spar, and good stones of ore, and seems to be increasing in size as we sink. The engine-lode, in the 68 east, is yielding good stones of ore, and looking very promising. The main lode, in the winze sinking below the 68, is full 3 ft. wide, carrying a good deal of fluor-spar, with strong spots of ore. The Menadue lode, in the 54 east, shows a leader of grey ore on the north wall, and the ground in the end looking very kindly. We have holed the winze below the 54, and have good ventilation in the 68 north. We shall begin to open on the Menadue lode, west of the cross-course, in a few days. The lode going east at the 68 fm. level is without any important alteration—a large kindly lode.

CARADON HILL.—F. Pryor, Jan. 2: We have been compelled to suspend the sinking of the winze below the adit level, on Davey's lode, in consequence of cutting a floor of spar, which considerably increased the water, so much that we could not keep it by manual labour. We shall resume the driving of the level west, in which there is a very promising lode. No alteration in the cross-cut north.

CARADON UNITED.—R. Knapp, Jan. 6: We have cut the caunter lode at the adit; it is 2 ft. wide, composed of gossan, spar, and peach, containing yellow and black copper ore, and native copper, an exceedingly promising lode; this intersection has taken place about 35 fms. west of the trial shaft, where the same lode is 4 feet wide, and orey throughout; we have put six men to drive east on this lode at the adit, and expect in a few fms. driving to cross an east and west lode, and soon after effect the complete drainage at the trial shaft, and resume its sinking; by this operation we expect to lay open a great deal of tribute ground. The main lode, going east, is 5 ft. wide; its prevailing character is tinny, but it contains some good quality copper ore, both black and yellow. We think we have about 20 fms. further to drive this end before we reach its intersection by the caunter lode, and have no doubt but that as we reach that point the tin will give place to copper, and a good lode be the result. The ground throughout the mine is of the most congenial character for that ore.

CEFN CILCEN.—W. Davies, Jan. 8: The 100 yard level, driving east from engine-shaft, is communicated with the winze sinking below the 96 yard level, which is at present worth 15 cwts. per fm. The 100 yard level, driving west, is worth ½ ton per fm. The 96 yard level, driving west, is not looking so well as when last reported on; on Friday last a strong feed of water broke into the winze sinking below the 96 east, which has greatly retarded the progress of operations at this point. We have a new working barrel and door-piece, which we intend to place in the present lift we had down, which will enable us to keep the water much better; after placing the above we intend sinking the engine-shaft below the 100 yard level. The water in Susan's shaft has not yet abated any.

CENTRAL MINERA.—W. Davies, Jan. 8: The western driving on the course of the lode is suspended on account of its being disordered, and the men have been put to sink a winze on the intersection of the lode with the great cross.

CROOKHAVEN.—Capt. Thomas, Jan. 6: There is no particular change in this mine since last week, except that the water in bottom of shaft is quicker than ever it has been, and I believe we are near a strong and powerful lode.

CROWAN CONSOLS.—J. Seymour, Jan. 7: Friday last, being our general survey and pay-day. I set the new shaft, called Ward's engine-shaft, to eight able shaftmen, for

the work, whom I selected out of nearly 100; they have already got down 3¼ fathoms, the ground being very soft for excavating. We shall soon get the shaft to the 20 below adit, but no doubt we shall have large and profitable courses of copper in the 12, where I intend to cross-cut to the Dumpling lode. I enclose you the assayer's ticket of the produce of the last ore we broke out of our adit level, which you will see is 13¼ per cent. for copper. We are getting on as fast as the weather will permit. We have a deal of rain, yet it does not hinder us much, our works being sheltered by hills on each side. I hope the masons will complete the building of the smiths' shop soon; the carpenters and sawyers' house is nearly completed, also the road to the mine. I hope to commence the building of the engine-house next week; I have let it at 2s. 5d. per perch, and in removing some ground for the boilers we have come upon a good quarry of stone for the buildings, so that we shall not have to pay anything for carting. The other quarry is only 3 land yards off from the engine-house. I was at Mill Pool Mine yesterday, and I took an inventory of all the materials belonging to the engine; the boilers are as good as new, and full 26 tons weight—one is 37 feet 6 in. long, and 6 feet diameter, the other 33 feet long, by 5 feet 9 in. The whole of the materials are considered to be about 80 tons, which I have let to Messrs. M'Coster and Simms to bring to the mines, and is a first-rate bargain.

CUDDRA.—F. Puckey, E. Dunstan, Jan. 8: Saturday last being our setting-day, we have not since taken down any lods in the different ends and stopes, consequently we have not any alteration to notice since our last weekly report.

CWMBRANE.—Jan. 8: There has been nothing done in the new shaft since my last. The 30 south is without alteration. In the 10 north the lode is large and very kindly, producing good stones of lead; the rise in back of this level will produce 6 cwts. of lead per fm. The stopes in bottom of the 10, north of rise, will produce 5 cwts. of lead per fm. Floyd's stopes, in back of the 10, will produce 8 cwts. of lead per fm.

DEVON AND CORNWALL UNITED.—T. Neill, Jan. 6: We have no change in the deep adit east. The lode in the rise is not looking so well at present. We have two stopes working in the back, worth 3 and 5 tons of ore per fathom.—William and Mary: The lode in the engine-shaft is worth 8 tons of ore per fathom. The 22 west is worth 2 tons. The rise in the back is worth 4 tons The north lode, in driving east, is worth 3 tons; the same lode west is worth 2 tons—a very promising end. We have two stopes in the back of the 10, worth 4 and 5 tons of ore per fathom. The lode in the 12, west of water-wheel shaft, is looking very promising.

DEVON NEW COPPER.—P. Hawke, Jan. 7: From the change that occurs in the winze sinking to the east of shaft below the 88, we must be very near the cross-course that was driven through in the 88 about 5 fathoms to the west of the winze. The cross-course dips east from the point intersected in the level about 3¼ or 4 feet in a fathom; therefore it begins to show itself in the winze. The leader may be somewhat disturbed at the intersection, but, nevertheless, to find the cross-course continuous in depth is, indeed, a pleasing feature for the production of copper ore. Last night the men engaged at the 100 broke through to a crevice, when the water came away as black as possible. I very much like the appearance of the cross-cut. We are progressing very fair with the erection of the water-wheel. The reservoir is entirely completed.

DRAKE WALLS.—T. Gregory, Jan. 8: The branches in the 102, east of Matthew's shaft, continue to produce some good work for tin. The branches in the 80, west of Betteley's shaft, are producing saving work for tin. The branches in the 60, west of Brenton's, are worth 15l. per fm. In the 50, west of Brenton's, we have intersected a side, which has shifted the branches south; it will take a few days to open ground in that direction for the intersection of the main branches. The branches in the 40, west of Brenton's, are worth 10l. per fm., and improving. The branches in Hooper's rise are worth 14l. per fm., and laying open profitable stoping ground. No other change.

DULTA.—J. Martyn, Jan. 6: Our bottom cross-cut has much improved; I have set to drive east on Dyer's lode, by four men, at 30s. per fm., and west on Snell's lode, at 25s. per fm. Snell's lode will go near Richards's shaft, where they had solid stones of tin. We have commenced clearing up Richards's shaft, and have found two stones of tin, all but solid, which gives me confidence in the correctness of former statements. We shall cross-cut from Snell's lode to Richards's shaft to prove this lode. We are stamping all the work we can, and the stamps are returning a fair quantity of tin. The dressing is progressing as fast as possible.

DYFNGWM.—E. Davies, Jan. 1: The 82 cross-cut has been extended further, and gone through a new lode; it is 4 ft. wide, with a leader of nearly solid lead, about 4 in. wide, and the other part of the lode contains spots of lead ore; the appearance of this lode is quite a mystery; what underlie it has is south, and at present it looks like being a diagonal (counter) lode; it has a promising appearance. I shall drive a short distance on it to enable me to say something about it in my bi-monthly report. There is no change in any other part of the mine. We are preparing to ship another cargo. The *Three Brothers* is still in port.

EAST ALFRED CONSOLS.—H. Skewes, W. Arthur, Jan. 7: There is no change in the 80 fathom level west of engine-shaft, on the south lode, since our last report. The 80 cross-cut, north of the above shaft, is progressing favourably towards the north lode. The south lode in the 70 fathom level, west of engine-shaft, is 9 inches wide, with occasional stones of ore, but not sufficient to value. In the 50 cross-cut, south of engine-shaft, the ground is easy for driving; we are pushing on this end with all vigour, as there are several lodes to cut standing whole to surface. There is no change in the 50 west, on the north lode. The north lode in the 15 fm. level, east of Orchard-shaft, is showing a more promising appearance, composed of mundic, blende, and white lead, with a more regular underlie; we expect a better lode in this end shortly. There is no change in any other part of the mine.

EAST BRONFLOYD.—Jan. 6: The lode in the stope west of engine-shaft is 9 feet wide, composed of slate, jack, and ore, yielding of the latter 23 cwts. per fm. The lode in the 10, east of shaft, is 31 feet wide (improving), yielding at present 30 cwts. per cubic fm. At the engine-shaft we are striking out a cross-cut into the lode, in order to put more men to work, and in a day or two we shall cut the lode, when we will let you know its value, which no doubt will be very satisfactory. The dressing is going on satisfactorily, and all surface work is going on well. All the machinery in good order.

EAST CARN BREA.—T. Glanville, J. Scholar, Jan. 7: In the 60, driving west of the cross-cut, the middle lode is yielding 3 tons of copper ore per fm. In the 50 west the middle lode will produce 1 ton of ore per fm. The other parts of the mine are looking much as usual.

EAST CLOGAU (GOLD).—K. Roberts, Jan. 6: Since my last report, No. 1 level, on St. David's lode, has been driven 7 ft.; the lode maintains its size and kindly appearance, but there is not any discovery yet worthy of particular notice. In No. 2 level, on St. David's lode, the lode has undergone a very favourable change within the last 8 ft. in driving, and judging from its present appearance, we are led to think that it will shortly make a good lode. In No. 1 level, on St. James's lode, our progress in driving is 6 ft.; no change here to mention. In No. 2 level, on St. James's lode, we have driven 3 ft.; this lode is still of a highly promising character, and maintains its size, 5 to 6 ft. In No. 1 level, on St. John's lode, our progress in driving is 3 feet; the ground is hard, and lode much the same in appearance as last reported.

EAST DEVON GREAT CONSOLS.—T. O'Neill, Jan. 6: The water is not yet quite out of the 70, but the engine is working well. In the 40 north we have intersected another east and west branch or lode, about 6 inches wide, composed of capel, spar, and mundic, being very promising for copper ore.

EAST JANE.—W. Hancock, Jan. 8: The western shaft is sunk 10 fms. 3 ft. under the deep adit level. All the lode standing on the western side for the last 6 ft. I propose sinking 2 or 3 fms. deeper, and then commence driving north and south in the country 2 or 3 fms. each way, before we cut through the lode: my reason for doing this is to keep the shaft secure; set to 16 men, 2 fms. stent, at 16l. per fm.; to work from 1 o'clock on Monday mornings until 10 on Saturday night. The water has not much increased since the stoppage of the engine; by this mode of working, the shaft can be sunk a little deeper, though rather expensive. The deep adit end is at present suspended. Three stopes working in the back of this level, employing 14 men, producing on an average about 3 cwts. of lead per fm.; price for stoping 12s. per fm., 10 fms. stent each pare, the shallow adit to drive north, by four men, 3 fms. stent, at 30s. per fm.; the lode in the end is divided into two parts, each part producing good stones of lead towards the bottom of the level; two men are engaged in the back of this level securing an old run in a stope, to make it available for working. Caunter lode to drive east, by three men, 3 fathoms stent, at 45s. per fm.; lode 1½ ft. wide, producing stones of lead. To tram all the ores and attle from the deep adit to the mouth of the adit by four men, one month, at 15l. 10s. To tram all the ores and attle from the mouth of the adit to the floors, by two men and two boys, for one month, at 9l.; the men to pay their own cost. The dressing is going on in a regular way. I have commenced dressing a large pile of dredge work that was put aside for the crusher.

EAST PROVIDENCE.—T Uren, Jan. 7: Boorman's shaft will be down to the 60 about the end of this week, when we shall commence to cut a plat and drive west to intersect the flookan, where we may expect to find tin ground that will pay well for opening. We shall also commence to sink the above shaft below the 60 as soon as possible. The 40 is driving west on the south lode by two men, at 70s. per fm. In this end the lode has a promising appearance. The same level is driving east by two men, at 70s. per fathom; lode 12 inches wide, producing stones of tin.

EAST ROSEWARNE.—S. James, Jan. 3: We have taken down the north branch at the 65, and find it to be 9 in. wide, worth 9l. per fm.; this seems to be a branch entirely distinct from the lode on which the shaft was sunk, and will intersect it about 6 ft. below the bottom of the shaft, from which intersection we may expect good results. We have set the 65 to drive both east and west. In the 65 east the two branches (inclusive) are worth 12l. per fm. The 65 west is of about the same value. In the 55 east the north lode is 6 inches wide, producing a little ore, but not to value. I have put the men to drive through the horse to cut the south lode, as it is probable this will prove most productive, being on the same bearing of the lode before the split. In the 55 west the lode is 15 in. wide, worth 35l. per fm. The stope over this level is worth 30l. per fathom. In the winze sinking below the 43 the lode is unproductive. In the 43 east, on the engine lode, the lode is 14 in. wide, containing mundic, with spots of copper ore. Our tribute department is much as for some months past.

EAST TRESKERBY.—J. Nancarrow, Jan. 3: The ground in the 40 north is more congenial for ore that it has been for months past. The 40 west, contrary to all expectation, is still in the elvan; there are several small branches, most of which contain ore. The lode in the 40 east is regular, there is ore in the end 3 feet high, which looks very promising. In the 55 east we have some rich lead; the lode in the breast of the end is poor, and I sting out water, as usual.

EAST WHEAL AGAR.—F. Pryor, W. Johns, Jan. 2: We are getting on as fast as possible in putting the engine together, and hope to be in a position to put it to work the latter part of this month. The lode in the winze is without alteration to notice since last reported.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Jan. 7: The lode in the engine-shaft is 2½ ft. wide, composed of quartz, peach, and mundic, with a little ore and tin—a kindly lode. The lode in the 55 east is 18 in. wide, composed of ore and a little tin, embedded in quartz, peach, and mundic; we are not yet clear of the influence of the cross-course. The lode in the 45 east is 2¼ ft. wide, but which we have not taken down for the last nine days; we shall do so in the course of this week, when you shall be fully advised. The lode in the 45 west is 18 in. wide, with good stones of tin and ore, worth 6l. per fathom. Two stopes in the back of the 45 west are worth for tin and ore 10l. per fathom each. The stope in the back of the 35 east is worth 6l. per fathom.—New Lode: There is no change in the 45, west of the cross-course, the ground by the side of it being principally elvan.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 7: Maynard's cross-cut in the 120 fm. level north, the lode having been cut into about 8 to 10 inches, which is composed of capel, quartz, prian, iron, grey sulphate and red oxide of copper ore, so far as seen a kindly lode; we bored in the lode 3 feet 9 inches, the sledge from the borer-hole contains rich ore, and a large stream of water flowing from the hole, which looks well. In the 120 fm. level east the lode is 3 feet wide, composed of capel, quartz, mundic, and good stones of yellow copper ore. In the 110 fm. level east, and east of Soper's cross-cut, on the south part of the lode, the lode is 2 feet wide—unproductive. In the 110 fm. level east, and west of Soper's cross-cut, on the south part of the lode, the lode is 3 feet wide, composed of capel, quartz, prian, mundic, and produces 1¼ ton of copper ore per fathom. John's stope, in the back of the 110 fm. level, is worth 22l. per fathom. Brokenshire's winze, east of Fewin's cross-cut, on the north part of the lode, is suspended for the present; the men are removed to drive the 110 fm. level, west of Fewin's cross-cut, on the north part of the lode, the part of the lode being carried is 5 feet wide, composed of iron, quartz, gossan, and spotted with black oxide of copper ore; a more promising lode I have not seen in any part of the mine. The 100 fm. level east is suspended for the present; the men are removed to drive Mollard's cross-cut north, in the 88 fm. level, to prove if there is any more lode in that direction. In the 88 fm. level east the lode is 2 feet wide, composed of capel and quartz, and producing rich stones of yellow copper ore. In the 66 and 45 fm. levels east the driving has been continued by the side of the lode in favourable ground for progress. In the 88 fm. level, west of Hitchins's engine-shaft, the lode is 2 feet wide, composed of capel, quarts, prian, mundic, and black oxide of copper ore—saving work, and looking promising.

EAST WHEAL TOLGUS.—Jan. 7: Redruth Consols Lode: There is no alteration for the better in John's shaft, sinking below the 82; the lode is 14 in. wide, composed of spar and capel, with spots of ore. The ground in the 82 cross-cut north is rather hard. We have not intersected the elvan course yet. The lode in the 34 east is 18 in. wide, consisting of peach, killas, spar, and mundic. The ground in the 34 cross-cut south is rather hard, and we expect it to continue so for the first few fathoms. The lode in the adit end, east of new shaft, is small and unproductive. The ground in the adit cross-cut is moderately easy.

GARREG.—W. Sandoe, Jan. 7: During the late heavy rains the water has compelled us to suspend operations at the old shaft, and also at the south shaft, and I have now put those men to sink a winze in bottom of the 20, near the whim-shaft, and a little behind the end; we have at this point a very kindly lode, 1½ ft. wide, producing calamine and lead, and taking in a large stream of water. The end going east from No. 1 stope is just the same as for some time past—a kindly regular lode, and producing good stones of ore.

GAWTON.—G. Rowe, Jan. 3: The 36 west still continues to present the same kindly appearance as hitherto reported on, with a portion of the lode standing both north and south; we, therefore, purpose to open on the lode more effectually—first, by putting up a rise near the end a short distance, which is to-day let at 4l. 10s. per fm.; at the same level to drive east on the south part of the lode, by four men, stent 2 fms., at 7l. 10s. per fathom. Tirrel's stopes, in back of the same level, by six men, stent the month, at 4l. per fathom; the lode still continues to look well, and will yield the usual quantity of ore, from 4 to 8 tons per fathom.

GLASGOW WHEAL GILL.—W. Rowe, Jan. 7: Taylor's shaft is down 22 fms. 2 ft. below the adit, in very congenial ground; I expect to get down the required depth for a 25 fm. level by the end of this month, when I purpose at once to commence cross-cutting towards the lode.

GREAT BRIGAN.—T. Trelease, G. Oates, Jan. 5: The ground in the engine-shaft, sinking below the 61 fm. level, is without change; it is still rather spare for sinking. No lode taken down in the 61 fm. level, driving east of the above shaft; it is 18 inches wide, and worth 15l. per fathom. The lode in cross-course shaft, sinking below the 49 fm. level, is 2 feet wide, producing stones of copper ore of a more kindly appearance. We have suspended the sinking, and the men have this day commenced to put in a skip-road, and hope to complete it in a fortnight from this time. The lode in the 49 fm. level, driving west of this shaft, is 4 feet wide, and worth 12l. per fathom. The North Treskerby lode in the deep adit level, driving west of Oates's shaft, is 2 feet wide, with stones of copper ore, but not to value. Our water is now about six strokes per minute.

GREAT CARADON.—F. C. Harpur, Jan. 3: The men are making good progress with the necessary work, previous to cross-cutting. The shaft is divided from the 40 to the 60, footway fixed, and the plat in a forward state of completion.

GREAT NORTH DOWNS.—T. Trelease, Jan. 5: Our progress in sinking the engine-shaft below the 47 during the past week has been slow, in consequence of the water being very quick. Vivian's lode in the 47, driving west of the said shaft, is about 3 feet wide, worth 12l. per fm., with a very kindly appearance, and still letting out a quantity of water, which we consider a favourable indication. The Pendarves lode in the 40, driving west of Rule's shaft, is 3 feet wide, containing spots of ore. We have cleared Jenkins's shaft from the 30 to the 47, and shall put in skiproad as soon as possible. No lode yet intersected in the cross-cut, south of Brown's and Lord's east shaft, but have intersected in the latter a branch about 8 in. wide, containing a little tin, which is saving work.—New Brigan Lode: The water has not yet fallen off sufficient at Job's shaft to put the flat-rods to work to drain this part of the mine below the 40. We have not yet intersected the Coal-yard lode at the 40, south of Bawden's shaft. The lode in the 20, driving east of Gribble's shaft, is without change during the past week. We expect to put the crusher to work in the course of this week; we should have done so on Saturday last, but for a flaw discovered in the crank on the main shaft, and are obliged to replace it by a new one before we think it safe for working.

GREAT RETALLACK.—W. H. Reynolds, Jan. 6: We have re-set the shaft to nine men, to be sunk below the 60, at 20l. per fathom. The 53 west is set to three men and three boys, at 4l. per fathom, to hole to the level west of the engine-shaft. The 40 east and west we have suspended until the communication referred to is effected. A winze on the Peru lode is set to be sunk below the 35, by six men, at 3l. per fathom, and a pitch in the back of the 35 is set to two men, at 6s. 8d. in 1l., and the men are raising some rich work. We have set to fourteen men to raise blende, at 11s. per ton, but the pitches are not at present looking so well.

GREAT SOUTH TOLGUS.—John Daw, Jan. 7: The lode in Lyle's shaft is 8 feet wide, worth 80l. per fm. for tin. In the 140 west, on the tin lode, the lode is 4 ft. wide, worth 10l. per fm. In the 125 west the lode is 1½ ft. wide, producing stones of copper ore, but not enough to value.

GREAT WHEAL BUSY UNITED.—Thos. Trelease, J. Petherick, W. Trelease, R. Giles, E. Richards, Jan. 6: The lode in the 130, driving east of Harvey's engine-shaft, is 4 feet wide, and worth 40l. per fathom. The lode in the level driving west of said shaft is still small, and unproductive. The lode at Fielding's shaft is at present small and poor. The lode in Offord's shaft, sinking below the 120, is 2 feet wide, yielding stones of tin. The lode in the 120, driving east of Offord's shaft, is 18 in wide, producing a small portion of copper ore, but not to value. The lode in the 110, driving east of Offord's shaft, is very small, and disordered with the elvans. There is no lode yet intersected in the cross-cut driving south in this level. The lode in Ham's winze, sinking below the 100, is 8 ft. wide, and worth 60l. per fm. The lode in the 100, driving east of Mathew's shaft, is 5 ft. wide, and worth full 30l. per fathom for tin and copper ore. The lode in the 100, west of Fielding's shaft, is still small and unproductive. In consequence of the water, we are obliged to suspend the sinking of Bawden's winze, below the 90, east of Mathew's shaft. The lode in the 90, driving east of Mathew's shaft, is still large, producing a little tin, but not to value. No lode yet intersected in the 70 cross-cut, north of King's shaft; the water still flows pretty freely from this end, but the air is very bad, and in order to ventilate it, we shall be under the necessity of putting in air-pipes, which will be done without delay. The lode in the 50, driving west of Black Dog shaft, is large, producing stones of copper ore.—Boscawen's Mine: Kitelee's shaft is not yet communicated to the 70, but we hope to do so in the course of a few days, not having more than about 6 feet to rise and to sink to accomplish this work. We are getting on pretty well with the sinking of Hunter's shaft below the 60, the ground just the same as last reported. The lode in the 60, driving west of Hunter's shaft, is 3 feet wide, with spots of copper ore, but not to value. There is nothing else new since our last report.

GROSVENOR.—W. Sandoe, Jan. 7: During the last week we cut a large stream of water in the cross-cut going south from the whim-shaft, from which I expect and hope that the lode is very near at hand. In the 47 yard level, going east from No. 1 shaft, the ground is favourable for driving, and I hope to prove something of the lode before us in two or three weeks. The tribute pitches throughout the mine are producing a moderate quantity of lead ore.

GWYDYR PARK CONSOLS.—Jehu Hitchins, Jan. 6: This adventure consists of two extensive setts under one grant—viz., the Gwydyr Park and the Gwayn Lliflon—in the parish of Bettws-y-Cord, in the county of Carnarvod, North Wales, and about 2½ miles from Trefrew Quay, on the Conway River, and near to the Dee, which is the best market for lead. These mines, as general report and the old workings evidence, have been continued on the various lodes, of which there are several as deep as the water could be kept without machinery. The present company consists of 6068 shares, and worked on the Cost-book Principle, upon which 17s. 9d. per share has been expended, principally in preparatory works, and have returned 64 tons 14 cwts. 2 qrs. lead ore, which sold for 857l. 3s. In the Gwydyr Park the deep adit has been driven upwards of 300 fathoms, to get under the old workings, where it is 26 fathoms deep, and a tramroad laid to discharge the stuff to the rubble heaps, and the ore to the dressing-floors. This level in driving has for some time been improving, and is approaching what I consider to be the best part of the ore ground; the lode is now 15 inches wide, saving work for lead ore, and although not rich is, nevertheless, very promising; and ahead of it, as near as I can judge, some 12 to 15 fathoms is a caunter lode to be cut, which report states yielded ore at 3s. per ton, and best when the workmen were driven out by an influx of water from the mountains. This lode will soon be drained by the deep adit; there are also other lodes which have yielded quantities of ore. In the Gwayn Lliflon Mine there are seven known parallel north and south lodes, within a distance of 125 fathoms, and two east and west lodes within 10 fathoms of each other, all of which have been very productive, so far as they could keep the water without machinery, either in this sett or close up to the north boundary in the adjoining mine. The adit, now over 100 fathoms in, is being driven on an east and west lode lately cut at about the point indicated; it is for the present small, and the ground rather hard, but we expect it to become more easy soon, so as to make better progress towards the lodes further west, which have yielded so much ore in former times, to expedite which there is now a good tramroad to discharge the stuff from the working, and soon we purpose to supply air-pipes for ventiliation, till a shaft on one of the lodes can be sunk for that purpose, as well as to prove the vein. At Gwydyr Park there is a good dressing-floor immediately at the mouth of the deep adit, with a water-power crusher, smiths' shop, store-house, &c. Having again inspected these properties, and the appearances and workings in the backs of the lodes, &c., I am confirmed in my first belief, that this adventure holds out a good prospect of success, and I advise that the operations contemplated should be carried out with energy.

— Capt. Smyth, Jan. 8: We took down the lode in Gwydyr Park deep adit this week; it is about 15 in. wide, composed of spar and lead ore, full as good as last reported—good saving work for lead ore. No alteration in the lode in Gwayn Lliflon deep adit since I wrote you last. The ground is improving for driving.

HARWOOD.—J. Race, Jan. 3: We are still rising from No. 2 cross-cut, but are not yet up to the limestone: they will be through in a day or two, when we shall begin to stope east and west in rich ore ground, and also to drive a cross-cut into the vein west of this ground, and also one 20 fathoms east. We can thus easily open out rich stoping ground for more men. The cross-cuts are driven from the level in the vein running parallel to this.

HAWKMOOR.—J. Richards, Jan. 6: The lode in the rise in back of the 50, east of the eastern engine-shaft, is 1½ ft. wide, producing some saving work for copper ore. The lode in the 30, west of Graham's shaft, is 1½ ft. wide, composed of capel, with spots of yellow copper ore occasionally.—West Hawkmoor: No. 3 lode, driving west of the adit level, is 2 ft. wide, composed of capel, peach, and occasional stones of tin ore. In the level driving east of the stopes the lode is 2 ft. wide, composed of peach, mundic, and very good work for tin ore. No. 4 lode, driving west of the adit level, is divided into branches of a kindly nature. We are employing only two men on this, and consequently but little change can take place in a week's driving.

HINGSTON DOWN CONSOLS.—T. Richards, Jan. 7: The 110, west of Morris's engine-shaft, is worth 30l. per fm. The 100 west is worth 15l. per fm. The winze sinking in the bottom of this level is worth 18l. per fathom. The stopes in the back of this level are worth, on the average, 22l. per fm. The 85 west is producing a little ore, and exceedingly promising. The stopes in the bottom of this level are worth, on the average, 40l. per fm. There is no change in any other part of the mine.

KELLY BRAY.—S. James, Jan. 3: The lode in the 85 east has somewhat improved since last reported on; it is now from 2 to 3 ft. wide, producing a quantity of mundic, and good stones of ore. The lode in back of the 35 east has fallen off in value in the past month; if it continued the same value as it was when last taken down in the rise we should have had a good sampling—the best for years, but I am glad to say the lode is again improving. We met with a small branch or cross-course, which heaved the lode north, and disordered it for the time, but we have cut in in the above direction, and discovered the main part of the lode, which is looking very promising to resume its former productiveness; at present it will yield from 1½ to 2 tons of good quality ore per fm. The pitches generally throughout the mine are producing about the same quantity of ore as for some time past.—Eastern Mine: The lode in the 70 east is producing more mundic than it hitherto has, and occasionally spots of ore. There is no change to notice in the 70 cross-cut, driving south; the character of the ground is much the same as for some time past, still mineralised, with branches containing mundic and spots of copper ore. Our sampling will be from 140 to 150 tons of ore.

KESWICK.—J. Postlethwaite, Jan. 3: In the adit level the vein is a little stronger, and very kindly in appearance; the stata, also, of a bearing character, so that the end altogether is promising. We have no change in the rise or stopes over adit. The 30 north end is looking unkindly; for the last few days we have not been working it, the air is so bad we can scarcely do so; I expect we shall improve the air by holing from the 40 to the 30 fm. level, near the end, in a few weeks. The mine is extremely wet at present, which affects the air in this end; we shall be obliged to suspend driving the end until we have better ventilation. To-day I am unable to get a light to the end, there being something like choke-damp in it. In the 40 north end the lode is small and unproductive. We have a part of the lode off to east of the level, and I expect this will come up again soon. In the 50 north end we have still a very strong lode, but at present it is harder, and the quartz more compact; it is spotted with lead, and I think we shall have more lead soon. In the 50 south the open ground and large lode continues, but we have not met with much lead yet; we have good stones of lead, but not regular; I am glad to see this open ground, as we shall now get on towards the old mine, when I have no doubt but we shall find lead. At Old Brandley, in cutting west from the western branch, we met no appearance of a vein, so I put the men to rise over the level at a point where there were indications of lead—indeed, we broke stones of lead in driving the level at this point; we have risen 4 or 5 feet, and have broken about 2 cwts. of lead, chiefly in lumps about the size of a man's hand; I cannot say what this will do, as it is scarcely in the vein at all, but in a string by its side, and nearly parallel with it, but having a different underlie. I think it best to follow the lead, as it will apparently lead to another small string, which leaves the vein not far from the same point, and the strings may do something when they unite.

LADY BERTHA.—Capts. Harpur and Metherell, Jan. 5: No lode has been taken down in the 53 east. The lode in the 41 east is from 2 to 3 ft. wide, composed of quartz, mundic, peach, and ore, worth of the latter 2 tons, or 8l. per fm.; the lode in this end has improved during the past week. In the winze sinking below this level the lode is 5 ft. wide, composed of quartz, mundic, and ore, worth of the latter 1¼ ton, or 4l. 10s. per fathom. No lode has been taken down in the 30 east during the week. In the stope above the back of this level the lode is 3 ft. wide, consisting of mundic, quartz, and ore, worth of the latter 3 tons, or 9l. per fathom. In the stope east of rise, in bottom of the 20 east, the lode is 2 ft. wide, composed of quartz, mundic, and ore, worth of the latter 1¼ ton, or 4l. 10s. per fm.; and the stope west of said rise is worth 3 tons of ore, or 9l. per fathom. The tribute department is yielding as much as usual—a moderate supply of ore. The ground in the cross-cut driving north at new shaft continues to be strongly mineralised, traversed by veins or branches, carrying mundic and stones of copper ore.

LADY ELIZA.—Capt. Williams: The bed of trap is disturbing the lode, and I do not expect that we shall get much ore in this level until we get through it.

LLANGAN.—F. Thomas, Jan. 7: We have set to work with sinking the engine-shaft in right good earnest, with nine men, at 15l. per fm. for the month, and this price would have been considerably reduced had the contractors all been acquainted with the work, as shaftmen usually are in Cornwall. The season of the year, and absence of pumping gear, must be regarded as another feature in the price as well as progress. The lode is very kindly, and carries with it two very good branches of lead ore—indeed, we cannot but save most of the stuff as it is brought to surface, and which will by-and-bye pass through the crusher to advantage. The engine and boiler-house is running up as fast as the masons can do it, and in a short time now we shall be ready for the engine, which I understand is taking out. I have received Mr. Gray's instructions about timber, slate, &c., and will endeavour to get the whole on the ground in good time, as well as the doors and windows, which we shall probably get cheapest made at Bridgend. The company is now doing what the mine really deserves, and if my knowledge of lead is worth a farthing, I have unbounded faith in a good deposit of ore as we get down. Even now the value of the lode sinking on, and that may shortly be taken away by stopes overhead, will necessitate the immediate erection of a crusher, as soon as we have the pumping gear going, as at present we can show prospects good enough to convince any practical man.

LONG RAKE.—F. Evans, Jan. 7: The 60 east has improved to nearly 1 ton of lead ore per fathom, and appears to be entering a fresh run of lead ground. The 60 west is producing saving work for lead. The 70 east is worth ⅛ ton per fm., and improving; and the stopes in the back of this and the 70 west are worth 15 cwts. per fm. Altogether the mine is improving for lead.

LOWER PARK.—W. Davies, Jan. 8: The eastern shaft is now down to the depth of 44 yards, and we expect to reach the 50 very shortly. The cross-cut driving south from the 26, in the office-shaft, continues speedy for driving. The rise in the back of the cross is producing a little ore, but not enough to value. The 40, in driving west of Stuart's shaft, has become hard for progress, and producing a little ore. We expect soon to reach the ore ground in the 20.

MAUDLIN.—J. Tregay, Jan. 3: In the 57 west, north end, the lode is 6 feet wide, composed of mundic and prian, with spots of copper ore. On the middle lode there is no change since last reported, but this level we are driving south to prove the south part of the lode. In the 50 west winze the lode is from 3 to 4 ft. wide, producing stones of black and grey copper ore; at this level, west of the cross-course, we are driving north, where we expect to meet with the lode.

— P. Rich, January 5: I find the engine-shaft sunk to the 57 fathom level below adit; in the 57 the end is driven east 3 fms.; the lode is large and poor. The west end is driven about 4 fms. west, through a lode averaging 1½ ft. wide, composed of copper ore, a large quantity of mundic, iron, and prian—a very kindly lode in its character; at this point cut a cross-course. We often find cross-courses—feeders for the east and west lodes, which heave the lode a little south. At this point we cut the lode to the west of the cross-course, which is 6 ft. wide, a strong, well-defined lode, composed of a little copper ore and a large mass of mundic, which, as a rule in nature in this locality, is considered the mother of ore. This end should be driven, as the prospects are good. I find in the 50 a cross-cut is driven to cut the lode from No. 1 cross-course; the lode is driven on (say) 10 fathoms west, to the next cross-course, through a very promising piece of orey ground, the lode varying from 4 to 6 ft. wide, composed of copper ore, a very large quantity ot mundic, iron, gossan, and prian. Such a lode, in my honest opinion, will make a large deposit of copper ore in depth. At this point the lode is moved out of its course by a cross-course. A pare of men are driving north to cut the lode west of the cross-course; when cut it will be a good speculation to pursue. A winze is sinking in the bottom of the level, on the course of the lode, to prove it, and to ventilate the 57, which is 5 fms. below the 50; the lode is about 4 ft. wide, of the same nature as the level over; this winze is in advance of the 57. The lode in the east end has changed its character, and is very poor. On examining the 33, west of the engine-shaft, the lode is about 3 ft. wide, composed of mundic, gossan, and quartz—a very promising lode, and easy for driving. In making a minute inspection in the Great Parlor, from which large quantities of tin and copper ores have been sold by former parties, I would suggest the prosecution of this end with great vigour, to drive west under the Great Parlor. By so doing I doubt not but you will find good bunches of tin and copper ore, as it is a highly promising piece of ground. I would recommend the sinking of the engine-shaft with all speed, to see the lode under the gossan; and when the lode changes its character, in my practical and honest opinion, those large courses of mundic will change into courses of ore, the stratum being highly mineralised and congenial for ore; also copper ore found in all the branches; these branches will drop into the lodes and feeders for them. After prosecuting these points you may fairly expect a profitable, lasting, and dividend-paying mine. Your machinery works well and cheap. You have ample power to put the mine very deep.

MERLLYN.—W. Sandoe, Jan. 7: The 20, north and south of shaft, are each just the same as when last reported on, producing excellent dressing ore stuff. The bottom end south has slightly improved of late, and is now producing a mixture of lead ore. The bottom end north is worth 5 cwts. of ore per fm., and the lode presenting a most kindly appearance. The dressing and other work on the mine go on regularly. We sampled yesterday 5 tons of ore for the sale to-morrow.

MICHELL.—W. Sandoe, Jan. 7: We are progressing with our work here as fast as we possibly can. The engine-house and stack will be completed this week, and the masons will finish all their work—building pumping-crank wall, fixing in the boiler &c.—in the course of next week, when the engine shall be put together, and set to work in the quickest time possible.

MINERA UNION.—W. T. Harris, Jan. 8: The lode in the 80 yard level north is very promising, composed of chert, carbonate of lime, and a little lead ore. The winze sinking below this level is down 14 yards; the lode produces occasionally good lumps of lead. The cross-cut, driving west of the 60 yard level, continues in favourable ground, with a good prospect of an improvement. The pitches in back of this produces lead as usual.—Llewellyn: Williams's shaft, sinking from surface, is down 12 yards; the ground is rather hard for progress, but as we near the lode, which we anticipate intersecting in about 5 yards further sinking, it will become easier.—Fine Shaft: The lode in the 35 yard level south is worth 10 cwts. of lead ore per fathom. The stope in back of this level produces 1¼ ton of lead per fathom. The pitch in back of this level produces 1 ton of lead per fathom. No alteration in any other part of the mine. This day we have sold 12 tons of lead, the produce of last month.

MOLLAND.—T. Bennetts, Jan. 7: In the 62 east we have a splendid-looking lode which will produce from 1 to 1½ ton of grey ore per fathom; the ore is disseminated throughout the lode, presenting scores of minute studes of crystallised grey ore; if this is the same lode on which we have been working in the levels above, the change here is a phenomenon in mining. We are obliged to suspend this end for the present, in order to push on the 52 east far enough to commence a winze, and get it through as soon as possible for ventilating, &c., our bottom levels. The stopes in back of the 42 east are poor at present, although producing good stones of ore. The lode in the winze sinking below this level is 3 feet wide producing good stones of ore occasionally. The stopes in bottom of the 32 east are producing 1½ ton of ore per fathom, of moderate quality. Our parcel of ore, which is above 50 tons, will be all at Barnstaple to-morrow or the following days, if all be well.

NANTY.—Jan. 6: The lode at the roadway level, north of boundary, is from 3 to 4 ft. wide, showing spots of ore at times; we do not expect any material change until we drive from 4 to 5 fms. further north from this point. The lode in the 10, above deep adit, going north of boundary, is 5 ft. wide, yielding 1 ton 15 cwts. per fm. The lode in the winze sinking below this level, 60 fms. north of boundary, is 5 ft. 6 inches wide, producing 1 ton 15 cwts. of lead ore per fm.; this winze is down 2 fms. 1 ft. In the four stopes above the 10, north of boundary, there is no change worth mentioning since my last. The lode in the deep adit level, going north of boundary, continues large, and yields good saving work. The lode in the rise over deep adit level, 60 fms. north of boundary, is 4 ft. wide, yielding from 15 cwts. to 1 ton of lead ore per fm. This rise is now up above the level 4 fms. The lode in the 40 stope over the deep adit, north of boundary, is 7 ft. wide, producing 10 cwts. of lead ore per fm. The lode in the 20 fm. level stope, over ditto, north of boundary, is 4 ft. 6 in. wide, producing 12 cwts. of lead ore per fm. The lode in the 15 fm. level stope, over ditto, north of boundary, is 7 feet yielding 10 cwts. of lead ore per fm. Dressing, &c., all going on regularly.

NEW BIRCH TOR AND VITIFER CONSOLS.—J. Lean, J. Symonds, January 2: Hambley's Shaft: In the 36 west the lode is 18 in. wide, producing very good stones of tin; we have to-day let the same level to drive east of shaft. The men are getting on very well in cutting tip-plat, and we expect it will be completed in about a week. In the 24 east, on north lode, the lode on last taking down was quite equal to our last report. We have set two very good new pitches in the back of this level—one east, to four men, at 5s. in 1l.; and the other to four men, at 4s. In the 12 east, on north lode, the lode is worth about 20l. per fm. We have also set a good new pitch in the back of this level to-day. The pitches in this part of the mine not set this day are producing about the same quantity of tin as for some time past.—Lance's Shaft: In the deep adit west, on Vitifer lode, the lode is 1 ft. wide, producing a little tin, but not enough to value. We calculate on sampling for the present month about the usual quantity of tin (say 8 tons), and should our new pitches turn out as we anticipate, we hope very shortly to increase our returns.

NEW SOUTH CARADON.—R. Knapp, Jan. 8: The general prospects of the mine are very improved. No. 1 lode is assuming a more approved character for copper as it gets into deeper ground; it is now 2 feet wide, composed of gossan, peach, and sugar-spar, and occasional good work for tin. No 7 lode is rapidly improving as it leaves the cross-course; it has almost already undergone an entire change; it is now composed of good character fluor-spar and peach, and producing good stones of rich

and the ground rather spare for excavating. Here we are looking forward to something better when we reach the cross-course. This level is extending into unexplored ground, and as the adjoining mines, on parallel lodes, west of this cross-course were exceedingly productive, we have reason to anticipate similar results. The plunger-lift is fixed at Good Fortune engine-shaft, and, if all be well, the 50 fathom level will be drained some time next week. The tribute pitches are looking tolerably well both at Carr's and Good Fortune, and we intend sampling on Tuesday week. The machinery, &c., is in good working order.

NORTH BASSET.—T. Glanville, G. Davey, Jan. 7: In the 152, east of the flat-rod shaft, the lode is 18 in. wide, composed of spar, with occasional stones of copper ore. In the 142 east the lode is 18 in. wide, producing stones of copper and tin ores. In the 102 west the south lode is worth 4*l.* per fm. for tin. In the winze under the 92 the lode is 3 ft. wide, worth 4*l.* per fm.

NORTH DOLCOATH.—J. Vivian, J. Paull, Jan. 3: In the past month we have sunk the engine-shaft 2 fms., and intend before commencing to drive to sink 1 fm. further, at which depth we expect to be clear of the cross-course; lode nearly 4 ft. wide, yielding good stones of yellow copper ore. In the 47 east the lode is 2½ ft. wide, much improved in character, and worth about 5*l.* per fm.; set to drive at 4*l.* In the 47 west the lode is 3½ ft. wide, composed of quartz and flookan—kindly; set at 3*l.* 10s. per fathom. The north lode, in the deep adit end east, is about 3 ft. wide, composed of gossan, flookan, killias, and mundic, and for the depth (about 4 fms. from surface) of a promising character.

NORTH LAXEY.—R. Rowe, Jan. 6: Since my report of Dec. 30 not much alteration has occurred. The 50 south has improved; the same level north is not looking quite so well. The 38 south continues on the mending side. New Year's Day and pay-day intervening, the week's work has been less than usual. We sampled 20 tons of ore to-day, to be sold on the 20th inst.

NORTH NANT-Y-MWYN.—Capt. Williams, Jan. 6: I have been all through the mine, and have given instructions to the men to clear the stuff out of the level in the wood, and as soon as they have finished that to begin to drive a cross-cut north, about 3 fms. from the end. The best plan would be, and the cheapest, to begin to sink at once at the old mine, then I am almost certain we shall have a good mine.

NORTH WHEAL LUDCOTT.—Wm. Hancock, Dec. 31: There is not much change since my last. The costeaning is going on in search of the lode opened on near the river, and the cross-cut adit is in favourable ground for the production of lead.

— Jan. 6: We cannot go deep enough in the valley further west on account of the water to cut the lode referred to in my last; we are costeaning the north part of the sett rapidly in search of other lodes. The cross-cut adit is in favourable ground; price for driving 24s. per fm., 10 fms. stent. Nothing done in the north adit on the lode since my last, the men are engaged in costeaning.

NORTH WHEAL ROBERT.—J. Richards, Jan. 8: Murchison's Engine-Shaft: In Elliott's cross-cut south, in the 52 west, the ground is still slow for progress, arising from the hard nature of the ground. In the 42 west, east of Davies's winze, on No. 1 south lode, the lode is 18 in. wide, consisting of capel and quartz, mundic and ore, saving work. In the 30 west, east of Edward's cross-cut, on No. 2 south lode, the lode is 1 foot wide, composed of mundic, capels, and good stones of ore. In the 30 west, east of Edward's cross-cut, on No. 1 south lode, the drivage is by the side of the lode, in which the ground is favourable. Fall's rise, in back of the 30, west is communicated with the 20 above, and the driving of the 20, rising and stoping of the back thereof, will be resumed forthwith, and where the lode is worth ¼ ton of ore per fm. In Strancombe's cross-cut north, in the 30 west, the ground is favourable, but owing to an increase of water renders it troublesome for prosecution.—Trial Shaft: In Tregemba's cross-cut north, in the 60 east, the ground is favourable for progress. In Scobie's cross-cut south No. 2 lode is intersected; it is 1 foot wide, and consists of capel, quartz, mundic, peach, prian, and good stones of ore.—Tin Lode: In the 42 west, and west of Rowe's cross-cut, or Bennett's winze, the drivage is continued by the side of the lode in favourable ground. In the 42 west, east of the former, the lode is 4 ft. wide, and yields saving work both of tin and copper ores. In the 20 west drivings are commenced both east and west of the cross-cut, by the side of the lode, in ground easy for driving.

— William Godden, January 7: I beg to state that we have intersected the No. 2 south lode in Scoble's cross-cut south, at the 62, west of trial shaft; the lode is about 1 foot wide, composed of capel, quartz, peach, mundic, and good stones of copper ore—a very promising lode.

PANT-Y-PYDEW.—R. Nankivell, Jan. 8: We are engaged at present in making washing-floors and other surface work. I expect the engine will be on the mine on the 12th inst., and will be working in course of a fortnight.

PAR CONSOLS.—F. Puckey, T. Rich, J. Hosking, Jan. 5: Eastern or Copper part of the Mine—Shepherd's Lode: In the 60, west of Treffry's man-engine shaft, we have cut the lode west of the cross-course, the lode is 3½ ft. wide, of a very promising appearance, composed of quartz, prian, and peach, and worth 15*l.* per fathom for copper. In the same level east the lode is 3 ft. wide, worth 10*l.* per fathom. In the 70 west the lode is 1½ ft. wide, producing saving work, and kindly to improve. In the 80 west the lode is 3 feet wide, and worth 8*l.* per fathom. The lode in the rise in the back of this level is 2 ft. wide, worth 8*l.* per fathom. In the 100 west the lode is 4 ft. wide, worth 10*l.* per fathom. The lode in the winze sinking below the 120 west is now small and poor. In the 200, east of the underlie shaft, the lode is 1 ft. wide, producing occasional stones of ore. We expect the lode in this end will improve in driving a few fathoms further east, as we have a good lode going down in the bottom of the 180.—Gossan Lode: We have no improvement to notice in this lode; the ends are at present poor. In the western, or tin part of the mine, our prospects are much the same as stated in our last monthly report.

PEDN-AN-DREA UNITED.—Wm. Tregay, J. Thomas, Jan. 3: Sump: The stope on the north side of the shaft, at the 120, is worth 20*l.* per solid fathom. The north wall is not yet reached. The 120 east end is worth 35*l.* per fm. The 120 west end is worth 50*l.* per fm. The 110 east end produces stones of tin. The lode in the winze in the bottom of this level is worth 60*l.* per fm. The 110 west end is worth 5*l.* per fm. The 100 east end is poor. The winze in the bottom of this level is poor. The 100 west end is worth 8*l.* per fm. The 90 east end is worth 12*l.* per fm. The 90 west, on the engine lode, is producing stones of tin. The 90 west, on Martin's lode, is producing stones of tin. The 80 west end is poor. The 55 west is poor.—Cobbler's: The 90 east end is not yet through the cross-course. The 90 west end is worth 4*l.* per fm. The 68 west end is worth 7*l.* per fm.—Street and Bragg's: The 47 east end is worth 2*l.* per fm. The branches in the 40 east are yielding coarse tinstuff. The water has been kept in fork all the week, and all the men working regularly in the bottom levels. The drawing-engine has been working without much hindrance, and the stamps have been kept regularly supplied with tinstuff.

PENDEEN CONSOLS.—J. Warren, Jan. 3: I see no change calling for remark during the past week. The 118 south is quite as good as last reported.

POLHIGEY MOOR.—Thos. Bennetts, Jan. 5: The north lode east is larger than we have seen it for some time, though not so valuable, the leader part being only 3 to 4 in. wide, good work. The cross-cut being driven south from this point is extended 5 to 6 fms.; ground very soft, and occasionally troublesome. The new shaft on the caunter lode is nearly 4 fms. below the 12; lode larger than last reported, more promising, and containing some good stones of tin. The shaft, however, is not yet in compact or settled ground, and the water is quite sufficient for the 6-in. lift with which we are sinking.

PROSPER UNITED.—W. H. Martin, W. Millett, J. Taylor, Jan. 8: At Louisa's engine-shaft the sumpmen are engaged cutting ground, preparatory to fixing a plunger-lift at the 60 fm. level. In the 60 end, east of Louisa's shaft, a cross-cut is commenced to drive north to prove the value of the lodes north of the elvans. In the 60 west the lode is 7 feet wide, worth 14*l.* per fathom for tin and copper. The lode in the winze sinking below the 50, on the north part of the lode, west of Louisa's shaft, is 4 feet wide, composed chiefly of sulphur, mundic, and stones of yellow copper ore. Hill's shaft is sunk 3 fms. below the 50, the lode is 1 foot wide, containing a little copper ore, but not to value. In the 50 end west the lode is 2½ feet wide, composed of peach, quartz, iron, and stones of grey copper ore—a promising lode.—Louisa's Lode: In the 50, east of Hill's shaft, the lode is 3 feet wide—saving work for tin. Hosking's engine-shaft is let to sink below the 70 fm. level, by eight men, at 20*l.* per fathom. The lode in the winze below the 60, east of Hosking's shaft, is 7 feet wide, worth 15*l.* per fathom. In the 50 east the lode is 3 feet wide, yielding low price stamping work for tin. In the 50 east of the cross-cut, north of the elvans, the lode is 3 feet wide, producing good stones of yellow copper ore and tin—saving work.

PROVIDENCE.—Wm. Hollow, Jan. 6: Since the date of our last report we have a bunch of lode in the 75 cross-cut south, on the cross-course, producing good stones of tin, but there is not enough seen of it to ascertain its value per fathom. There is no other change to notice.

REDMOOR.—T. Taylor, Jan. 6: The lode in back of the 30 is worth about 7*l.* per fm. The lode in the 40 end west is small and poor. No alteration in the 40 cross-cut worthy of notice. Tribute pitches as usual.

RIVER TAMAR.—J. Cock, Jan. 7: In the winze sinking below the adit level the lode continues about 3 ft. wide, of a promising appearance, and yields good stones of ore; the water has increased during the past week. The cross-cut driving south is proceeding favourably.

ROSEWALL HILL.—E. Thomas, Jan. 7: All the necessary preparations for sinking the engine-shaft below the 150 are completed, and shall now commence sinking the said shaft below this level with all speed. The lode in the 150 west is worth about 50*l.* per fathom. The Ransom part of the lode, in the 120 west, is producing tin, but not to value; the same will apply to the end east of shaft, and also to the 110 east. The lode in the 80 east has improved, now worth 8*l.* per fathom, and from present appearance it is likely to be more valuable. The stopes over this level are worth 10*l.* per fathom; the stopes in bottom of the same level, east of Noall's winze, are worth 8*l.* per fathom. The lode in the 70 east is worth 7*l.* per fathom. The lode in the east is small and poor. The lode in the 40 east is worth 7*l.* per fathom. The lode in the 30 east is worth 6*l.* per fathom.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Jan. 7: We have nothing of importance to notice during the past week. All our operations are in regular progress. We shall give a full report in our next.

ROSEWARNE UNITED.—H. Woolcock, Jan. 8: The new engine-shaft, on the south lode, is sunk about 11 fathoms; ground good for sinking. In the adit, west of Poole's shaft, the lode is 1½ foot wide, producing stones of copper ore and mundic. In the adit, east of main adit, on Giesler's lode, the lode is about 1½ wide, producing occasional stones of copper ore and mundic. The adit end, driving east of Blueburrow shaft, on Lannock Moor lode, at present unproductive. In the adit end, driving west of Doble's shaft, on the north part, the lode is 15 inches wide, producing good stones of copper ore, and opening ground that will be taken away on tribute.

ROYALTON.—T. Parkyn, Jan. 8: We have been raising splendid work for tin; the lode is still holding itself very good, and we have large rocks of tin at surface, that you will be surprised to see raised so shallow. Our prospects are really good.

SILVER MOUNTAIN.—C. Williams, Jan. 5: In the cross-cut north, in the deep adit level, the ground is becoming more congenial for lead ore, being composed of jack, mundic, spar, and ore, but not enough of the latter to value; I have no doubt before long we shall make a good discovery at this point. In Blue shaft the lode is from 12 to 13 feet wide, composed of slate, quartz, jack, gossan, and silver-lead ore, yielding of the latter, for an average length of 30 feet, 3 tons per cubic fathom, with every prospect of becoming much more productive. I would now advise erecting suitable machinery for crushing as well as pumping without delay. The dressing and surface work is going on satisfactorily.

SILVER VEIN.—E. Burn, Jan. 8: The engine-shaft is down 8 fathoms below the 20; the lode therein is 3 feet wide; the orey part is about 1 ft. 6 in. wide, and from present appearances likely to improve. The ground continues favourable, and the shaftmen are making good progress in sinking. In the 20 north the lode is small and rather disordered, in consequence of it being in contact with another slide. In driving a few feet from its influence I have no doubt the lode will be found to open up again productive. In the stope, north of shaft, the lode is 2½ ft. wide, producing good ore.

SORTRIDGE CONSOLS.—R. Jackson, Jan. 8: In the 50, west of Mayne's cross-cut, on No. 2 south lode, no lode has been taken down this last week. In the 50, west of ventilating shaft, we have commenced to drive south, as we think there is more lode standing in that direction. In the 40, west of Stancombe's cross-cut, on the south part of the lode, the lode is 1½ foot wide, composed of spar, capel, mundic, and good stones of ore. In the 40, west of John's cross-cut, on the south part of the lode, no lode has been taken down this last week. In Gilbert's cross-cut north, at the 40 east of the eastern shaft, the ground is favourable for driving. In the 30, west of the engine-shaft, on the main part of the lode, the lode is 3 feet wide, composed of spar, prian, gossan, and good stones of ore. In Stancombe's rise, in the back of the 20, east of the eastern shaft, on the north part of the main lode, the lode is 1½ foot wide, worth ½ ton of ore per fathom. The tribute department is much the same as for some time past.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 3: The ground in the 90 cross-cut north is of just the same character as when last reported on.

SOUTH CARN BREA.—T. Glanville, Jan. 7: In the flat-rod shaft, sinking below the 98, the lode is worth 30*l.* per fm. In the 98, driving west of the flat-rod shaft, the lode is worth 10*l.* per fm. In the 98 east the lode is worth 10*l.* per fm. In the new shaft, sinking below the 88, the lode is worth 10*l.* per fm.

SOUTH CRENVER.—E. Chegwin, Jan. 6: In the 124, driving west of flat-rod shaft, the lode is 1½ ft. wide, producing 1½ ton of ore, worth about 9*l.* per fm., but ground spare for driving. In the 124, driving east of flat-rod shaft, the lode is 2 ft. wide, producing 1½ ton of ore, worth about 6*l.* per fm. In the 105, driving east of the flat-rod shaft, the lode is 2½ ft. wide, producing 1½ ton of ore, worth 9*l.* per fm.; the lode in this end has improved in the past week. In the 105, driving west of the flat-rod shaft, the lode is 2 ft. wide, producing 1 ton of ore, worth 4*l.* per fm., and ground favourable for driving. Our tribute department is without change to notice.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, Jan. 7: On Monday last the following tutwork bargains were set:—The flat-rod shaft to sink under the 12 by six men, at 18*l.* per fm. The 12 to drive east of shaft by two men, at 4*l.* per fm. A winze to sink under the adit by two men, at 6*l.* per fm. A rise in the back of the 70 by two men, at 6*l.*, and the 50 fathom level to drive east by four men, at 10*l.* per fm.; in this end the lode is about 1 ft. wide, producing good ore—tribute ground.

SOUTH EXMOUTH.—J. P. Nicholls, G. Maunder, Jan. 7: The west lode, in the 45 north, is opened to full 4 ft. wide, and is of the most promising appearance, consisting of white iron and barytes, with lead disseminated throughout; this end is now approaching the point where the lode so much improved in the level over; we are, therefore, daily expecting to meet with a rich lode in this end. The 45 south, on the west lode, is still in disordered ground; the lode in the end is small, and unproductive of lead to value. The east lode, in the 45 north, is the full width of the end—a very kindly lode, although at present unproductive of lead to value. The stopes in back of this level, on the west lode, on the whole, are rather improved since last report. The shaftmen are engaged putting down the main rod, fixing lift, &c.; this work, together with the fixing of the skip-road in the whim-shaft, has somewhat interfered with our progress during the past fortnight; but, however, we hope to get the whole completed by to-morrow evening, when we shall be in a position to sink the shaft and carry on all other operations without let or hindrance. There has been no lode met with in the 30 south since it was hove out of its course by the slide. We have commenced a winze in the bottom of the 30, north of James's shaft; the lode is producing good stones of lead, and has every appearance of improving in depth. We sampled, on Friday last, the 2d inst., a parcel of lead of the usual quality (computed 85 tons). All our surface operations, including dressing, are progressing satisfactorily.

SOUTH WHEAL TOLGUS.—Jan. 7: Youren's Lode: Michell's shaft to sink under the 140; the lode is 15 in. wide, unproductive. In the 140, west of Michell's shaft, the lode is 20 in. wide, unproductive. In the 130, west of the same shaft, the lode is 20 in. wide, producing 3¼ tons of ore per fm. In the 120, west of the same shaft, the lode is 1 ft. wide, yelding stones of ore. In the winze sinking under the same shaft the lode is 20 in. wide, producing 3½ tons of ore per fm. In the 110 west the lode is 3 ft. wide, yielding 4 tons of ore per fm. In the 100 west the lode is small and unproductive. In the 90 west the lode is small and unproductive. In the 75 west the lode is 15 in. wide, composed of spar and peach. In the stope in bottom of the 120 west the lode is yielding 3 tons per fm. In the stope in bottom of the 100 west the lode is worth 3¼ tons per fathom.—South Lode: In the cross-cut south, in the 140 east, the ground is hard for driving. In the 130, east of Michell's shaft, the lode is large, and producing stones of ore. In the 120 east the lode is 2 ft. wide, consisting of spar and mundic. In the 110 east the lode is 2 ft. wide, consisting of peach, spar, and stones of ore. In the 100 east the lode is 2 ft. wide, unproductive. In the stope in bottom of the 100 east the lode is yielding 3½ tons of ore per fm.

ST. DAVID'S (GOLD).—H. B. Parry, Jan. 3: The settings for the month are as follows:—Elizabeth Lode: Griffith, Williams, and Co.: Four miners driving at the rate of 130s. per fm.; the lode is more than the width of the level, which is nearly 5 ft. wide, and is composed chiefly of quartz, spotted with copper ore, and a little pyrites, &c.—New Adit: We are pushing on, but it requires more time than I thought of to go under cover; still I will do my best.—Bwichcoch Upper Level: Richard Davies and Co.: Two men driving at the rate of 120s. per fm. There is no alteration in the nature of this lode.

ST. JUST UNITED.—J. Carthew, Jan. 7: Having now been working one year, I shall this week lay before you how our men are employed:—Three men working steam-engine and stamps, and two at the steam-whim; two men watching stamps day and night, two masons building walls at new stamps, three men raising and bringing stone to masons, four men and two boys sawing timber; five carpenters, three smiths, six men making leats and fixing launders for bringing home clear water to engine; four men preparing tin dressing-floors; one man, three boys, and two girls at water-stamps, and ten men, thirteen boys, and ten girls at steam-stamps dressing tin; six men landing at the different shafts; eight men spalling and filling carts; five men, with five carts, carrying tinstuff to stamps; two men driving a cutting in order to lay a tramroad to replace the cart work to stamps,—being on surface, 66 men, 18 boys, 12 girls. Underground we have—one pitman; two sumpmen in engine-shaft; three men clearing up Oats's shaft, and three men clearing up a winze below the 70; two men clearing the 50 east of this shaft—the stuff we are clearing from these will pay well for stamping; three men clearing the 70, east of East Buck shaft, and three men clearing up the shaft below this level; two men clearing the 50 west, and two men driving the 50 east of this shaft—a good lode of tin in the end 18 in. wide; three men stoping over this level; two men driving the 50 west, on the new lode, in good tribute ground; three men laying tramroad in the 70 west, on Wheal Owl lode; four men clearing up the winze below the 50, east of the Red Dipper shaft,—the Red Dipper shaft is now complete to the 80, and we shall at once commence to extend the 80, east and west; six men fixing skips and kibbles; one timberman and one miner securing levels, and on tribute 75 men and ten boys; also, on tribute at the surface, turning out burrows, three men and two boys. Being a total employed on surface of 101; underground, 126 = 227 persons. We are discovering good tribute ground.

TOLCARNE.—Jan. 7: The lode in Field's shaft, sinking below the 40, is 4½ feet wide, strong and kindly. The 40 east is producing 1 ton of grey ore per fm. The 30 fm. levels, east and west, are both poor at present. In the 20 east the lode is 16 in. wide, composed of gossan, spar, and prian. In the 10 east the lode is 20 in. wide, composed of gossan and soft spar, with stones of ore. In the adit level east the lode is 2 ft. wide, composed of gossan, greens, and stones of ore. The stopes and end on Enthoven's tin lode are poor, worth about 5*l.* per fm.—New North Lode: The 30 fm. levels, east and west, are producing 1 ton of black copper ore each per fm. The cross-cut at the 40 is in moderate ground. King's lode, in the 12, west of King's shaft, is 1 ft. wide, composed of fluor-spar, with stones of copper ore. In the 12 east it is poor. The adit level cross-cut south is in hard killas. The tributers are raising a fair quantity of ore. Our sale of copper ores on the 1st inst. realised 735*l.* 0s. 5d. for two months.

TRELOWETH.—T. Richards, Jan. 7: The lode at the engine-shaft looks better, but not to value. The ground in the 144 end east is a little easier for driving. In the 134 end east we can drive the level for 4*l.* per fm.; the lode is worth 14*l.* per fm.; we have now had the copper ore in this level 19 fms. in length, although for 3 or 4 fms. the end did not contain much ore, more than from 1 to 2 ft. high from the bottom of the end. The sump-winze is sunk below the 134 fm. level 6 fms. 1 foot 6 in.; lately the ground has been somewhat harder, but at no time has the lode been better for copper, nor a larger or more promising one. In the second winze we have got down 10 ft., and to water; the lode is worth 14*l.* per fm.; the men are put to stope the bottom of the level between the two winzes. Stope west of the sump-winze is worth 8*l.* to 9*l.* per fm.

TRELYON CONSOLS.—R. James, E. Pooley, Jan. 8: In the 50, west of new shaft, the lode is not so rich as when last reported on, its present value is 20*l.* per fm.; this is now under the run of tin ground driven through in the level above, where the lode was about the same value (20*l.*) per fm. The other points of operation without change.

TREVEDDOE.—J. Folgiase, Jan. 8: We are preparing to work the stamps day and night next week, upon fair average work, and will, no doubt, leave a profit.

TREVENEN AND TREMENHEERE.—J. Medlen, W. Tippett, Jan. 6: The engine-shaft sinking below the 178 is worth 20*l.* per fm. The stope in this level is worth 14*l.* per fm. The 170 west end is rather hard for driving, but it is still worth 8*l.* per fm.; we have left the greater part of the lode, and are driving in the country. The stope behind this end is worth 20*l.* per fm. Trevenen whim-shaft is now nearly cut down to the back of the 160; the men will now be engaged for a short time in taking out pent-house, putting in skip-road, &c. The 150 west end yields saving work for tin. There is no change to notice in the tribute department since last report. Tremenheere adit is just in the junction of granite and killas, consequently the branches are small and poor.

TREWEATHA.—T. Foote, J. Scoble, Jan. 6: The engine-shaft has been sunk during the past month; the ground continues hard and troublesome for sinking. In the 30 south, which has been driven 4 fms., the lode south of the slide is 2 ft. wide, producing 5 cwts. of lead per fm., and very promising to improve. The lode in the stope in back of this level is at present yielding 3 cwts. of lead per fm. The winze in bottom of the 15 has been sunk 2½ fms.; the lode is 18 in. wide, worth 5 cwts. of lead per fm. Owing to the excessive rains, the water has very much increased. The water in the old mine is as high as it was—3 ft. above the back of the 20.

TRUMPET UNITED.—G. R. Odgers, Jan. 3: The engine-shaft to sink below the 38 fm. level by six men, at 17*l.* per fm.; lode 8 in. wide, and producing occasionally good stones of tin; the water is bubbling up from the bottom. This shaft is 10 fathoms below the 38, and I was thinking to sink as deep as the 50 before we open east and west. The 38 west to four men, at 4*l.* 10s. per fm.; lode 10 in. wide, and producing some good work for tin, worth 5*l.* per fm.; this end is only 9 ft. behind the point where the tin came in at the 15, hence we look forward to an improvement. The 25 west to four men, at 10*l.* per fm.; here the lode is small, but it is precisely the same as it was before meeting with the tin in the 15, and as it is only 9 ft. from the point we may, I think, reasonably look forward to the meeting of tinny ground. The stope below the 15 to two men, at 4*l.* per fm.; lode worth 4*l.* 10s. per fm. The 15 west to four men, at 7*l.* 10s. per fm.; lode worth from 8*l.* to 10*l.* per fm. The stopes above the 15 west to four men, at 5*l.* per fm.; lode worth 10*l.* per fm. The 30, east of shaft, to four men, at 3*l.* per fm., on Wheal Ann lode, where the lode is 8 in. wide, and producing some good stones of tin. A pitch in the bottom of the 20, east of shaft, on Wheal Ann lode, to two men, at 12s. in 1*l.* We have cleared up the flat-rod shaft as deep as the 20, where the lode is split into two branches, each of which is producing some good tin. We have also set the smith's work and the landing at much the same prices as before. We hope, seeing the several points that are coming off shortly, that our prospects ere long will materially improve. We are getting on as fast as we can with the dressing of another parcel of tin.

VALE OF TOWY.—A. Waters, T. Harvey, Jan. 7: We are now engaged putting sollar in the bottom of Clay's engine-shaft preparatory to shooting down the lode and driving north and south at the 124. We shall be able to report on the width and character of the lode on Thursday next. At the 70 we have resumed the cross-cut east on the slide. Not being satisfied with the part of the Derrick lode seen, we shall cross-cut a fathom or two further, to see if there be any more lode standing in that direction. In the 60 north the Derrick lode is 3 feet wide, yielding saving work for lead ore. In the 50 we have intersected the lode north and south of slide, and a few days to start a level each way. The lode shows good indications on both sides, and the ground about is very congenial to the production of lead ore. In the adit, south of Nant, the lode is large, but not so orey as of late. We are into another hard bar of ground, which accounts for the poorness of the lode. The tribute department offers no change since setting day. We have sent off No. 1 and are now sending away No. 2 parcel of blende,

WEST BASSET.—Wm. Roberts, Jan. 10: At Grenville's engine-shaft, sinking under the 114, the lode is 3 ft. wide, producing stones of ore. In the 114 west the lode is 2 ft. wide, at present unproductive. In the same level east the lode is 3 ft. wide, producing good ore—tribute ground. The 84 west produces stones of ore; the lode is 2 ft. wide, and likely to improve.—Middle Lode: In the 42, east of the cross-cut from Thomas's shaft, the lode is 4 ft. wide—good work for tin. No other alteration to notice.

WEST CARADON.—F. Pryor, W. Johns, Jan. 2: We have to-day set in addition to our usual number of bargains the 17 to drive east of cross-cut, on Pryor's lode, where we would expect to meet with something good. We have also set the usual number of tribute pitches, and consider, on the whole, that the mine is looking a shade better. Our sampling is pretty near to a close, and shall have about the same quantity as the last.

WEST CLOGAU.—R. G. Price, Jan. 7: In No. 2 lode (Liechfraith) our progress in driving has been 3 fms., varying in width from 1 to 1½ ft. wide; the quartz contains iron pyrites and sulphuret of copper. In No. 4 (Liechfraith) our progress has been 3 fms. 4 ft. Stoping above adit from the air shaft, towards the entrance, the quartz is beautiful, and expecting daily to see visible gold; the white metal is to be seen in the quartz now and then, which is a sure sign that the gold is not far off. No. 5 (Cachur) cross-cut is driven 13 ft. 6 in., and expecting daily to cut this fine lode; in the forebreast the ground is a hard greenstone, with patches of spar, which is always the case when near-

ing the lodes. No. 6 (Bwichcoch) is driven 13 ft., varying in width from 3 to 4 feet; the quartz is of a hard and compact nature, containing sulphuret of copper, iron pyrites, and blotches of lead. No. 7 (Bwichcoch) our progress has been 9 ft.; the lode is in disturbed ground, and no quartz at all is to be seen in the breast at present, and has been very poor for this last month. I should suggest that the No. 7 be discontinued for the present, and put the two men that are working there in No. 4 (Liechfraith adit), on the breastwork, to push on towards the boundary, or, I may say, towards Clogau. Every possible speed is made to get ready the building for Mosheimer's machinery; the foundation, groundwork, and walls are complete; the woodwork is in a forward state; a new road had to be made (branching off the other road, that was made some time ago to the adit) to the new buildings, in order to take the machinery, &c., there, and also to carry quartz; its length is about 50 fms.; this will be completed by next week, weather permitting. I am sorry to say that the weather has of late checked our progress. Mr. Mosheimer was here yesterday, and gave directions for cutting the foundation for the turbine; it will be in a bed of solid rock. I have put men on to get down as soon as possible. On the whole, our prospects are very encouraging.

WEST DEVON.—J. Donnal, E. James, Jan. 8: The lode in the 50, east of south engine-shaft, is from 2 to 3 feet wide, composed of mundic, capel, quartz, and stones of copper ore, a very kindly lode. We have commenced to drive and stope in the eastern end of the winze; down about 3 fms. below the 40; the lode in the present end is from 5 to 6 ft. wide, and will produce about 2 tons of copper ore per fm.—Setting Report: The 50 to drive east by six men, at 8*l.* per fm., stented 2 fms. To drive and stope from the eastern end of the winze, in bottom of the 40, by two men and two boys, at 2*l.* 15s. per fm., stented 4 fms. All the whim drawing, filling, and landing from the 50, at 4*l.* 2s. 6d. per fm., and from the 40 at 18s. per fm.

WEST PAR CONSOLS.—Wm. Woolcock, Jan. 8: We have a lift of pumps on the mine which I have borrowed, and have dropped 11 fathoms below the 45; we are now forking the water, the next drop, I hope, will be to the bottom, after which we shall soon recover the plunger, and put it all right. We have been keeping the water at the 45, and I have put a few tributers that we can spare from the capstan to break tinstuff at that level to keep on the bounder stamps as soon as we can haul it. The men are working in the 30 end, east of Dawke's; the lode here is 2 ft. wide, yielding some good stones of tin, much improved since last reported. In consequence of the water being in the 55, and stopping the communications from that level to the 45, there is no air for the men to work in the rise above the 45, east of Dawke's shaft. Owing to the water being in the mine it has greatly interfered, and will throw us back in the proposed new work of getting in order and sinking Dawke's shaft; we have been unable since this occurred to get on with any part of it.

WEST SHARP TOR.—W. Richards, Jan. 5: The 162 east is about 8 fathoms from No. 2 cross-cut, and the ground being very much better, good progress will now be made; the part of the lode now being cut into is chiefly capel and quartz. In No. 2 cross-cut, in the 162 east, and in the bottom of the end in the extreme point, there is a little elvan showing, which would indicate that we are very nearly through the lode; the part of the lode now being cut into in No. 2 cross-cut, in the 162 west, contains kindly quartz, capel, prian, mundic, and spots of rich copper ore—water percolates freely from the extreme point.—Setting for January: The 162 to drive east of Morris's engine-shaft, as directed by the agent, by six men, stented the month out, at 6*l.* per fathom; taken by James Clemo and Co.

WEST WHEAL JANE.—J. Tonkin, J. Smith, Jan. 3: In the 10, west of Painter's, the 6 ft. of the lode in which we are driving is worth 20*l.* per fathom; we hope to open some good tin ground now between this end and Venable's shaft. In the 20 east the lode is still looking well, and worth over 30*l.* per fm.; if this tin continues it will be a very important addition to the value of this part of the mine. Our stamps are now capable of stamping nearly all the tin we raise, and the improvements and additions in the tin floors and burning-house will enable us now to dress about 15 tons of tin per month.

WEST WHEAL TREVELYAN.—J. D. Osborn, Jan. 3: In driving south at the 58, west of cross-course, we have to-day intersected a branch, and, judging from the level above, we have about 6 ft. further to drive to the main lode. In the back of said level we have two stopes working, worth 7*l.* per fm. each. The men are getting on satisfactorily in casing and dividing Charles's shaft, and putting in footway. A stope in bottom of the 48, east of Charles's shaft, is worth 5*l.* per fm. In driving west on Pryor's lode, at the 28, we find the lode a little disordered by a slide.

WHEAL AGAR.—Wm. Roberts, Jan. 7: The water is issuing freely from the 100 cross-cut south, by which we are inclined to believe that a lode is not far off; our progress here is slow, in consequence of the ground being hard. In the 90 west the lode is 1½ ft. wide, producing stones of ore. In the same level east the lode is 1 ft. wide, with stones of good ore. In the 80 east the lode is 2 ft. wide, producing occasional stones of ore. We expect to communicate the rise and winze in the 80 and 70 to-morrow, which will ventilate both levels, and make advantage for setting tribute ground. The sinking of the western engine-shaft is progressing favourably.

WHEAL ARTHUR.—T. Carpenter, Jan. 8: We are making fair progress in sinking the engine-shaft, and the lode is yielding stones of copper ore. We have met with a small cross-course in the 10 fm. level west, which has disordered the lode. I hope we shall cut through the cross-course in a few days, and find the lode more productive.—Edward's Lode: The lode in the adit level east is 3 feet wide, yielding stones of ore. The lode in Prout's rise and stope, in back of the 50 east, is 3 feet wide, yielding 2 tons of ore per fathom. The ground in the 30 cross-cut, driving towards the wheel-pit lode, is more favourable for progress, and we are daily discovering small branches of mundic; this end is driven 4 fms., and I expect we have 1 fm. more to drive to reach the lode. Our pitches are yielding the same quantity of ore as they have for some time past.

WHEAL CREBOR.—Capt. Gifford, Jan. 7: The lode in Cock's shaft is 3½ feet wide, composed of capels, quartz, and peach, yielding in the westean end, and half-way over the shaft, 2 tons of mundic and 1½ ton of copper ore per fm. In the 72 east the lode is 2 ft. wide, composed principally of capel with stones of ore. In the winze in bottom of the 60, east of Cock's shaft, the lode is 3 feet wide, a mixture of capel, mundic, and ore. The tribute department is the same as for some time past—the men making good wages.

WHEAL DAMSEL.—Jan. 3: The 50 cross-cut is cleared south of Turtle's lode about 20 fms., and we are daily expecting to reach the end; there is still a large stream of water issuing from the same, which is, no doubt, coming from a lode, as we find it is strongly mineralised.—Turtle's Lode: In this level, east of cross-cut, the lode is 2 ft. wide, and still producing good stones of ore.—Tremayne's Lode: The lode in the 50, east of cross-cut, is 1 ft. wide, composed of mundic, peach, and spar, with a little yellow copper ore intermixed. The men are engaged in cutting down Dunstervilie's shaft, on the south lode, which we hope will be completed in about three weeks from this time, when we shall at once resume its sinking in the granite in a fine-looking lode. The lode in the 40, west of cross-cut, at King's shaft, is 18 in. wide, composed of mundic, spar, and iron, with spots of copper ore, and the ground favourable for driving. Other places are without any alteration to notice.

WHEAL EDWARD.—G. Rowe, Jan. 3: The shaftmen are still engaged cutting trip-plat in the 92, which is progressing very satisfactorily. The lode in the 92 west is 2 ft. wide, principally composed of spar and capel, with good stones of ore. The 81 fm. level west is not quite so good as last reported on, now worth 2½ tons of ore per fm. The 61 west is without change to notice. The 61 east is within a short distance of Arthur deep adit, where we expect to form a communication in a few days. The lode in the 50 west has still a very kindly appearance, worth at present 2 tons of ore per fm. The stopes in the bottom of this level are worth 5 tons of ore per fm. The rise in the back of the 40 east is looking well, worth 3 tons of good quality ore per fm., and likely to lay open some valuable ore ground in this direction. In Bray's cross-cut, driving south, we have met with a small branch, containing good stones of ore, in which the ground is strongly mineralised, but slow of progress. There is no particular change in the appearance of the tribute department during the past week. All our machinery and pitwork are in good working order.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Jan. 8: The ground in the 120 is very much eased, and are now making good progress towards the point where we had the bunch of ore in the 110. The lode in the 90 west will produce full 1 ton of ore to the fathom. There is a good lode in the 80 west, producing more than 2 tons to the fathom.—New Lode: The lode in the winze sinking below the 80, and the stopes above the 80, are looking much the same as for some time past. There is no alteration in any other part of the mine.

WHEAL GRYLLS.—E. Rogers, J. Pope, Jan. 8: Annie's engine-shaft is sinking at 14*l.* per fathom, and is down 2 fms. 4 ft. 6 in. below the 30; the lode is worth 50*l.* per fathom for length of shaft, 10 feet. In the 30 end, driving east of this, the lode is worth 8*l.* per fathom; price for driving, 2*l.* per fathom. The 30 end, west of flat-rod shaft, is driving at 3*l.* 10s. per fathom. The lode in the 30, east of the western shaft, we are cross-cutting south at 1*l.* 10s. per fathom, as we expect the main part of Fisher's lode is gone off in that direction.—Georgia Lode: The engine-shaft is sinking at 15*l.* per fathom, and is down 5 feet below the 10. In the ending driving north, at the 10, the lode is worth 50*l.* per fathom, and driving at 3*l.* 10s. per fathom. In No. 1 stope, in the back of this level, the lode is worth 35*l.* per fathom; stoping at 2*l.* per fathom. No. 2 stope is worth 20*l.* per fathom; stoping at 6*l.* per fathom. In the back of the 33, No. 1 stope is worth 18*l.* per fathom; price for stoping 4*l.* per fathom. No. 2 stope is worth 12*l.* per fathom; stoping at 6*l.* per fathom. The 23 is driving north at 1*l.* 10s. per fathom. No lode has been taken down for the week. In the rise in back of this level the lode is worth 30*l.* per fathom, and rising at 6*l.* per fathom. In our tribute department we have 56 men employed at a tribute varying from 3s. to 10s. in in 1*l.*, the tributers paying

40, east of Forth-cus, is looking very promising, worth 6*l.* per fm.; this end is issuing more water than usual, which we consider a favourable indication. The stopes are without change to notice since our last report. The ground in driving towards Trewavas lode is more favourable for driving, but nothing further discovered since our last.

WHEAL SIDNEY.—W. Edwards, Jan. 8: The lode in the 60 end east has given occasionally good stones of tin, but at present is poor, still continues large, and letting out a great deal of water. The lode in the 60 and west is showing a little improvement today; the ground has become more favourable for driving, lode opening larger, and producing a little tin. The lode in the 23 west is 2½ ft. wide, giving good stamping work. The stope east of winze, in back of the 60, is yielding good stamping work; west of _litte, not so good. The stopes in the upper levels are without change to notice.

WHEAL TRELAWNY.—R. Pryor, T. Grenfell, Jan. 3: The 162, south of Smith's, is improved in appearance, worth 5*l.* per fm. The 182 north is worth 4*l.* per fm. The 172 south is worth 4*l.* per fm. The 172 north is poor. In the 162, north of Chippendale's, during the last month we have passed through some good tribute ground; the present end is at this time disordered by a slide. The 142, north of Chippendale's, is worth 4*l.* per fathom. The winze sinking below the 140, north of Trelawny's, is worth 15*l.* per fathom. The 152, north of this shaft, and near the winze, is also worth 15*l.* per fathom. We have set our usual number of tribute pitches, but are compelled to give longer tribute. Our pay and setting went off very well. We sampled on Saturday last 60 tons of crop ore; seconds, 50 tons.

WHEAL TREMAYNE.—R. Williams, J. Williams, Jan. 3: The new engine-shaft is sunk about 3 fms. under the 133; the lode in bottom of the said shaft is 10 in. wide, yielding low price tinstuff; the ground is still thickly mixed with floors of spar; in the same level, east of shaft, Allen's branch is yielding low price tinstuff, with a favourable appearance. In the 123, east of the same shaft, Allen's branch is worth 26*l.* per fm. The winze sinking under the same level, on Allen's branch, is down 4 fms. 3 ft.; the branch is worth 14*l.* per fm. In the 113, east of the same shaft, Allen's branch is worth 20*l.* per fm. The stopes in back and bottom of the same level, on Allen's brauches, are worth on an average 12*l.* per fm. In the 103 cross-cut south, towards the engine lode, we think the lode is close by from the indications. The stope in back and bottom of the same level, on Allen's branches, is worth 10*l.* per fm. In the cross-cut north of the same level, towards Allen's branches, there is no change to notice. The men at the new engine-shaft are now engaged cutting ground in the 103 for footway, barrow-road, &c.

WHEAL UNION.—T. Glanville, Jan. 7: In the flat-rod shaft the lode is 5 ft. wide, composed of spar, mundic, copper, and tin ores—saving work. In the winze sinking below the 18 the lode is 9 ft. wide, composed of gossan, mixed with black copper ore.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Jan. 5: The flat-rods to the new shaft are working remarkably well, and the men have almost finished fixing the plunger, and by the end of the week will resume sinking the shaft. In the 75 west the engine lode is large, and of a very promising character. We have a great increase of water in this end, and are looking out for an improvement. Other parts of the mine are much the same as last reported.

WHEAL UNY.—S. Coade, M. Rogers, Jan. 3: Tin Lode: The lode in the 100, west of engine-shaft, is worth 15*l.* per fathom for tin. The 90, west of incline shaft, is worth 10*l.* per fathom. The 80, west of incline shaft, is worth 5*l.* per fathom. The 80, east of engine-shaft, is worth 9*l.* per fathom. The 60, west of incline shaft, is worth 10*l.* per fathom.—Copper Lode: The lode in the 48, west of No. 3 shaft, is 9 in. wide, producing stones of copper ore, but not to value. The lode in the 58, west of No. 3 shaft, is worth 5*l.* per fathom. The lode in the 58 east is 2¼ feet wide, producing stones of copper ore and tinstuff, to the value of 4*l.* 10s. for the last fathom driving. The rise over the 58 west we expect to hole next week. The ground in the new engine-shaft is more favourable for sinking.

WORVAS DOWNS.—R. Harry, Jan. 7: Saturday last being our setting-day, the following tutwork bargains and tribute pitches were let:—The stopes in the back of the 60 east, by six men, at 7*l.* per 100 barrows; lode 10 feet wide, worth 25*l.* per fathom. The 50 west to clear and repair, by two men, at 15s. per fathom; we have about 8 fms. to clear at this point to reach the end of the ground, and when completed we shall commence driving west under the tin gone down in the bottom of the 40 with all possible dispatch. The 40 to drive north on the caunter, by four men, at 4*l.* per fathom; the lode here is about 12 inches wide, producing good stones of tin—saving work, and likely to improve shortly. The 30 to drive east, on the north lode, by two men, at 45s. per fathom; our object in driving this end is to get in over the north Carbona, so extensively wrought on by the former workers in the levels below, and where we expect to lay open some profitable tin ground.—Tribute: No. 1 pitch, in bottom of the 40, on the caunter lode, by four men, at 8s. 4d. in 1*l.* No. 2 on Carbona, in the deep adit east, by four men, at 18s. 4d. in 1*l.* No. 3, in back of Wheal Flat adit, by two men, at 13s. 4d. in 1*l.* Our month's sale of tin, on Friday last, realised 134*l.* 3s., and from present prospects our returns will increase.

YARNER.—R. Barkell, Jan. 7: The ground in the engine-shaft sinking below the 40 is congenial for copper. In the 40 west we have two cross-cuts, the one north and the other south; this is being done to ascertain if there is any more lode standing, but up to the present date we have not met with any. The two stopes in the bottom of the 30, east and west of Rodda's winze, continue to yield 3 tons per fm. each. We have commenced to drive the 30 west on north lode, where we have two branches about 4 in. wide, each composed of peach and mundic. We are getting on with our dressing as fast as possible, and have now between 80 and 90 tons dressed.

THE CLEVELAND IRON DISTRICT.

At a recent meeting of the ironmasters of this now important iron-producing district, the following results were arrived at from actual returns made by each firm to the meeting:—

Total number of furnaces erected	80
In blast, Jan. 1, 1863	59
Out of blast, Jan. 1, 1863	21
Production of pig-iron for the year 1862.....Tons	630,000
Stock of pig-iron in the whole district on Dec. 31, 1862	25,964

And inclusive of iron in store.

By reference to the *Mining Journal*, it will be seen that, whilst the production of Pig-iron has increased, the stocks of iron have decreased:—

On Dec. 31, 1860, the stock was .....Tons	70,053
On Dec. 31, 1861, the stock was	52,453
On Dec. 31, 1862, the stock was	25,964

These statistics are very interesting, as they show the trade to be in a healthy thriving condition, and that the demand for Pig-iron is more than equal to the supply.

COPPER ORE IN SOMERSETSHIRE.—In the lands of the Ecclesiastical Commissioners, at about one mile south-east of the City of Wells, there has been found a vein, or rather three veins, one of which, about 2 feet wide, has been sunk upon for about 20 feet deep, and has yielded some very good specimens of the grey and blue sulphuret of copper, as also green carbonate. Mr. Jehu Hitchins has recently been called in by the lessee or grantee to inspect it, and thinks it well worth further trial. His report will give more detailed particulars.

TYWARNHAILE MINE.—It will be seen by our advertising columns that a prospectus has been issued for increasing the capital to work this valuable mine. It is stated that already the returns are nearly 300 tons of copper ore per month, and that these can soon be considerably increased. The dues are very low—namely, 1-24th. According to the arrangement made, no premium or profit is asked, and looking at the unusually good prospects of the mine, and the very influential committee of management, the remaining shares to be disposed of are likely to be taken in a few days, the greater portion, we understand, being already subscribed for.

PROGRESS OF MINING.—Mr. J. Y. Watson's Nineteenth Annual Review for the past year, issued under the above title, is now ready. The character of the Review is so well known, as a valuable guide to mining investors, that it would be superfluous to particularise the contents. The statistics are given with the usual accuracy, and the facts appear to have been collected with equal care. The pamphlet contains a very large amount of useful information, and adventurers will find that a shilling could not be better invested than in the purchase of it.

THE METAL TRADE.—Messrs. James and Shakspeare yesterday issued their Annual Review of the Metal Trade, which contains a large amount of statistical and general information. With reference to the position of the trade they remark:—"We have seen . . . a stagnation and depression which has not been witnessed for the last 15 years, chiefly caused by the falling off in our exports to the States, and the uncertainty attached to all operations, from the impossibility of foreseeing the duration or issue of a contest almost unparalleled in history." As we published a full report upon the metal trade during 1862, in the *Mining Journal* of Dec. 27, from our own correspondents, it is unnecessary to allude to the details given with respect to the several metals.

Messrs. Von Dadelzsen and North have also issued an elaborate statement with reference to the trade of the year. They remark that its unsatisfactory position at the commencement of 1862 continued during the first six months, dulness and declining prices being the prevailing features. During June a more hopeful feeling was manifested, and this soon grew into an animated trade, all articles being affected in the same manner. The ferment in the iron trade was mainly caused by the great demand for iron for shipbuilding and armour-plates: the acknowledged fact that these would be an absolute necessity in all maritime countries gave confidence to consumers of iron of all kinds. We regret to say, however, that during the past month there has been a decided return to dulness, although most articles have sustained their nominal value. This has been mainly caused by the universal feeling that the American civil war will last for some time longer. How far the late severe defeat of the Federals may lead to a termination of the war remains to be proved; but, from the feeling expressed against the Executive, we may hope that some means may be found to bring this lamentable war to an end.

ELY-MERTHYR COLLIERY COMPANY.—Reports from the colliery state that they have now driven some distance in the Abergorky steam coal, and an air-way has been driven through to meet the level. The coal looks exceedingly well, and cuts very hard.

DERBYSHIRE RED BOOK.—The new edition, for the present year, of the useful little volume bearing this title has just been issued, and is calculated in every way to sustain the high reputation of its predecessor. Several important additions have been made in the volume now before us, including the lists of high sheriffs of Derby during the last 450 years, the cab fares for an area of five miles round Derby, &c., and a very interesting view of "quaint old Derby." The article on the Mineral Resources of the County is so excellent that we shall take an early opportunity of making several extracts from it. The information contained is of so varied a character that whatever is desired to be known with reference to the inhabitants and institutions of Derbyshire will readily be obtained from it.

On New Year's Day a deputation of the workmen of Gosforth Colliery met at the house of Mr. John Menham for the purpose of presenting that gentleman with a gold watch and chain on his retiring from the situation of under-viewer of that colliery, which he has held for the long period of 32 years. The presentation was made by Mr. G. Charlton, the cashier, with a few appropriate remarks, to which the worthy gentleman feelingly responded.—*Newcastle Daily Chronicle.*

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Jan. 9, 1863.

COPPER.	£	s.	d.	
Best selected....p. ton	101	0	0–	—
Tough cake..... „	98	0	0–	—
Tile ..... „	98	0	0–	—
Burra Burra .... „	98	0	0-99	0 0
Copiapo ..... „	—	–	–	—
Copper wire .....p. lb.	0	1	1⅛	—
ditto tubes ..... „	0	1	1–	—
Sheathing & bolts p. ton	105	0	0–	—
Bottoms ..... „	110	0	0–	—
Old (Exchange) .... „	91	0	0–	—

IRON.	Per Ton.			
Bars, Welsh, in London..	6	10	0–	—
Ditto, to arrive	6	10	0– 6	15 0
Nail rods	7	0	0–	—
„ Stafford. in London	7	10	0–	—
Bars ditto	7	5	0– 8	0 0
Hoops ditto	8	7	6– 8	10 0
Sheets, single	9	5	0– 9	15 0
Pig, No. 1, in Wales ..	3	10	0– 4	0 0
Refined metal, ditto....	4	0	0– 5	0 0
Bars, common, ditto....	5	15	0–	—
Ditto, merchant, in Tees	6	10	0–	—
Ditto, railway, in Wales	5	12	6– 5	15 0
Ditto, Swed. in London.	11	10	0-12	10 0
To arrive	11	15	0-12	10 0
Pig, No. 1, in Clyde....	2	15	6– 2	18 0
Ditto, f.o.b. in Tees ...	2	8	0– 2	10 0
Ditto, forge, f.o.b. in Tees	2	5	0–	—
Staffordshire Forge Pig.	—	–	–	—
Welsh Forge Pig	—	–	–	—

LEAD.				
English Pig	21	10	0-22	0 0
Ditto sheet	21	15	0-22	0 0
Ditto red lead	22	0	0–	—
Ditto white	28	10	0-30	0 0
Ditto patent shot	23	0	0-23	10 0
Spanish	20	10	0–	—

BRASS.	Per. lb.
Sheets	10¼d.– —
Wire	9¼d.-10d.
Tubes	11¼d.-12¼d.

FOREIGN STEEL.	Per Ton.			
Swedish, in kegs (rolled)	15	0	0-15	10 0
„ (hammered).	15	10	0-16	0 0
Ditto, in faggots.....	16	10	0-18	0 0
English, Spring	18	0	0-23	0 0
Bessemer's, Engineers Tool	44	0	0–	—
„ Spindle	30	0	0–	—
QUICKSILVER	7	0	0	p. bottle

SPELTER.	Per Ton.			
Foreign	18	0	0–	—
To arrive	18	0	0-18	5 0

ZINC.				
In sheets	23	5	0-23	10 0

TIN.				
English, blocks 115	0	0–	—	
Ditto, Bars (in barrels)..116	0	0–	—	
Ditto, Refined 120	0	0–	—	
Banca 119	0	0–	—	
Straits 117	0	0–	nom.	

TIN-PLATES.*				
IC Charcoal, 1st qua. p. bx.	1	8	0– 1	8 6
IX Ditto 1st quality „	1	14	0– 1	14 6
IC Ditto 2d quality „	1	4	6– 1	6 0
IX Ditto 2d quality „	1	10	0– 1	12 6
IC Coke ..... „	1	2	6– 1	3 0
IX Ditto..... „	1	8	6– 1	9 0
Canada plates ....p. ton	12	10	0-13	0 0

In London; 20s. less at the works.

Yellow Metal Sheathing .p. lb.	8¾d.–9¼d.
Sheets .....p. lb.	8d.–9¼d.
Indian Charcoal Pigs in London	6 12 6– 6 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The new year has not yet brought increased activity in the Metal Market. We generally expect buyers to be operating at the commencement of the year for forward delivery, and speculating on the improvement which is usually looked for in the spring; but at present the prospects of the future are so extremely doubtful as to be anything but satisfactory. Prophecies as to the termination of the American war have so often been falsified, that people are disinclined to speculate on so uncertain an event; and even should the awful strife by some means be stopped a considerable time must elapse before our trade with that country will again assume anything like its former dimensions, and it is questionable if ever it will do so again, as the necessity of heavy customs' duties, and all the ill-feeling which has been engendered, may prove strong barriers to a renewal of trade. The demand for metals for India has slightly improved.

COPPER.—English manufactured very dull of sale; orders can be placed at about 10¾d. Cake, tile, and ingot are difficult to realise at 95*l.* In foreign a rather better feeling exists, but nothing approaching to activity in demand is visible. Burra Burra, 98*l.* for cake. Ingots realise about 20s. per ton more; Kapunda, 99*l.*; Chili, 87*l.* to 88*l.*; Spanish, 88*l.* to 90*l.*, according to brand.

YELLOW METAL.—Braziery sheets obtainable at 8d. to 8¼d.; sheathing, 8¼d. to 8¾d.; in slightly more demand.

IRON.—Greater firmness is manifested by ironmasters. Rails are now qnoted firmly at 5*l.* 12s. 6d. to 5*l.* 15s. at works. Merchant bars, 6*l.* 10s. to 6*l.* 15s., f.o.b. in London; only a limited enquiry exists. Staffordshire descriptions in good demand, at full list prices. Sheets and hoops especially in request. Swedish bars are just now quiet; no sellers under 11*l.* 10s., higher rates being anticipated shortly, as the arrivals must now of necessity be very few, only some few ports being still open, and the stocks here are low. Scotch pigs early in the week declined to 54s., since which buyers have come forward more freely, and the price has advanced to 54s. 10½d. buyers, 55s. sellers, mixed numbers, f.o.b. in Glasgow. Shipping brands in steady demand.

SPELTER.—There appears to be very little vitality in this market. Sellers and holders continue to have confidence in its stability, and quote 18*l.* with tolerable firmness; WH in Hull has realised 5s. to 10s. above this figure. ZINC in good demand, at 23*l.* 5s.

TIN.—English without improvement, obtainable at 20s. to 30s. per ton below fixed price. Foreign very quiet. Straits at 117*l.* cash; Banca, 118*l.*, nominal. Stocks considerably in excess of the last three or four years.

TIN-PLATES in ordinary request. The principal shipments continue to be made to America. IC coke, 22s. 6d.

STEEL.—Swedish keg and faggot steady, at quotations.

A very large amount of business has been transacted this week in the MINING MARKET both in dividend, progressive, and speculative mines; indeed, we never remember so great a demand for shares at the commencement of a new year as now exists in the market, and it seems to increase daily. On the whole, also, prices have been firm, and in many cases considerable advances have taken place. East Caradon shares have been very active all the week; they opened on Monday 44 to 44½ sellers, and leave off 45½ to 46, ex div. At the meeting, held on Wednesday, the accounts showed a profit of 6717*l.*, and a dividend of 6144*l.*, or 1*l.*, per share was declared, leaving 2097*l.* 12s. 9d. in hand. The next sampling will be 475 tons, and the agent estimates that the discoveries of ore in one month are nearly equal to two months' returns. As several extra costs have been charged in the accounts, the *actual* profit on current costs was over 7000*l.*, and as all charges on account of new engine and pitwork have been paid, an increased dividend may be expected at the next account. In another column, however, such full details of the meeting will be found, that it is unnecessary for us to enter more particularly into the question here; it is sufficient for us to say, that in the discussion which took place the riches and lasting prospects of the mine were made to stand forth as the strongest and best eulogium on its manager, and the fitting answer to those who endeavoured to disparage it. It also shows our readers that those who relied upon the statements regarding it, from time to time (and we may say, indeed, from the commencement of its history), inserted in this article, have reason to be thankful that they did so, instead of being led away by statements made, in some cases at least, for mere market operations. North Roskear shares have been greatly in demand all the week, and have advanced from 48 to 59½, 60½; the winze below the 184 is reported worth 80*l.* per fathom, in the 174 the winze is worth 80*l.* per fathom, and the 184 end west 50*l.* per fathom. The shaft set to sink below the 184, on the lode, is worth 120*l.* per fathom for the 9 feet. The 140 fm. level end west, on Reeves's or Seton lode, has improved. Cook's Kitchen shares have been in demand, and leave off 32 to 33; the dispute between this mine and Tincroft as to account for tin taken from the latter sett is to be settled by reference, and the next meeting held in February; the engine-shaft is down to the 246; the south part of the lode west is worth 16*l.* per fm.; the east, 40*l.* per fm.; in the sump-winze the lode is worth 60*l.* per fm. for length of it; the winze between the 212 and the 222 fm. levels is worth 150*l.* per fm.; the present yield of tin, the report states, is greater than at any past time. Marke Valley, 8¼ to 8½, ex dividend; at the meeting the accounts showed a profit on the quarter of 952*l.* 9s. 11d., and a dividend of 2s. 6d. per share was declared, leaving a balance of 2101*l.* 6s. 2d. in hand. The mine just now is not rich, but the agents hope to keep up the 2s. 6d. dividends; and in the 80 cross-cut the south lode is expected to be intersected before long. West Rose Down, 15 to 20; at the meeting a call of 15s. per share was made, and a favourable report read. South Frances, 90 to 95; at the meeting, on Monday, the accounts showed a profit of 672*l.* 8s. 6d., and a dividend of 1*l.* per share (496*l.*) was declared, leaving 2264*l.* 15s. in hand; the 84, east of Pascoe's, was worth 40*l.* to 50*l.* per fm. for 3 fms. in length; the end is now worth 10*l.* per fm.; a rise above this level is worth 40*l.* per fm. for 4 fms.; the end is now worth 10*l.* per fm; the stope over the 74 is now worth 40*l.* per fm. Camborne Vean, 1¼ to 1⅝; Cargoll, 41 to 43. Grambler and St. Aubyn shares in demand at 18 to 20, call paid; at the meeting, on Wednesday, the accounts showed a balance against the company of 224*l.* 4s. 5d., and a call of 1*l.* per share was made; the report shows several points of interest to come off. Clifford Amalgamated, 19 to 20; Devon Great Consols, 500 to 510; East Basset, 54 to 56; East Carn Brea, 11¼ to 11½. East Russell shares have advanced, and leave off 4 to 4¼, upon an improvement. East Chiverton, 4¼ to 5. Carn Camborne, 15s. to 17s.; at the meeting a call of 1s. 6d. per share was made; the accounts showed a balance of 161*l.* 11s. 1d. in favour of the mine; and there is an improvement in the caunter lode in the 13. Gonamena shares have advanced from 2 to 2¾, 2¼. Great Retallack, 11s. to 12s.; Great South Tolgus, 7¼ to 7½; Great Wheal Fortune, 31 to 33; Herodsfoot, 48 to 50; Illogan Consols, ⅜ to ½; Kelly Bray, ¾ to ⅞; Lady Bertha, 1¼ to 1⅜; New Seton, 150. Wheal Crebor shares have been very largely dealt in, and after opening this morning at 18s. to 20s., leave off 23s. to 25s.; on Monday they opened in good demand, and advanced to 18s.; Tuesday, opened at 18s., and advanced to 25s.; Wednesday, opened at 25s., rose to 28s., and left off 22s. 6d.; on Thursday heavy "bearing" operations commenced, and the price was put down to 18s. The report received on Thursday states the lode in Cock's shaft is 3½ ft. wide, composed of capel, quartz, and peach, yielding in the western end, and half-way over the shaft, 2 tons of mundic and 1½ ton of copper ore per fm. North Basset, 2¾ to 3; North Crofty, 5¼ to 5⅜. North Downs shares in request at 2¼ to 2⅜; at the meeting, held on Friday, the accounts showed a loss of 468*l.* 18s. 3d. on the two months' working, and a balance in hand of 110*l.* 9s. 7d. North Phœnix, 6¾ to 7; North Treskerby, 4 to 4¼; Par Consols, 5 to 6. Pendeen, 5¼ to 6; the lode in the 118 south is worth 40*l.* per fathom. Wheal Grenville shares have been extensively dealt in, and leave off 5 to 5¼; the mine continues to look well. East Grenville shares also largely dealt in, and leave off 49s. to 51s. Trumpet United shares largely dealt in, and leave off 7s. to 8s.; the mine is progressing well. Bryn Gwiog, 29 to 31; the mine is looking better in the 75, and in the bottom of the mine; the 75 west is worth 2 tons of ore per fm.; there are about 60 tons of lead for sale.

Providence shares, 41 to 42; Rosewall Hill and Ransom, 3¾ to 3⅞; Rosewarne United, 17s. 6d. to 20s.; South Basset, 8 to 8¼; South Caradon, 390 to 400; South Caradon Wheal Hooper, 15s. to 17s. 6d.; South Herodsfoot, 4 to 4¼; South Tolgus, 45 to 47½. Stray Park shares not quite so firm, at 38 to 39. Tincroft, 13¼ to 14; Tolvadden, 3¼ to 3½; Treiyon Consols, 14¼ to 15¼; Vale of Towy, 5s. 6d. to 6s. 6d.; West Basset, 13 to 14. West Caradon, 28¼ to 30, and more in demand. West Seton, 285 to 295; West Tolgus, 54 to 56; Wheal Arthur, ⅞ to 1; Wheal Buller, 50 to 52½; Wheal Grylls, 31 to 33. Wheal Harriett shares have advanced to 3¼, 3½, and a large business done. Wheal Ludcott, 9 to 9¼, ex div. of 10s. per share declared at the meeting; the report, we understand, was not so favourable. Wheal Margaret, 41 to 42; Wheal Mary Ann, 15 to 16. Wheal Seton shares have been in request, and advanced to 250, but have been flatter for the last day or two, and leave off 235 to 245. Wheal Trelawny, 17¼ to 18¼; Wheal Union, 5¾ to 6; Wheal Unity, 11s. to 13s.; Wheal Uny, 7⅛ to 7⅜; South Minera, 5 to 6; Park Mines, 9 to 10.

The prospectus of the Ramsay Lead Mining and Smelting Company, with a capital of 100,000*l.*, in share of 5*l.* each, has just been issued. The object of the company is to purchase and work the well-known Ramsay Lead Mine, situated within three quarters of a mile of the Brockville and Ottawa rivers, in an old and thickly populated country, where fuel, provisions, and labour are cheap and abundant. The property is very favourably referred to in the reports of Sir Wm. Logan and Captain Plummer (Messrs. John Taylor and Sons' agent at the Wellington and Copper Bay Mines, on Lake Huron), both of whom have carefully surveyed it. The mining rights extend over 100 acres of land, and there are already erected an engine and smelting-house, with furnaces, plant, dwelling-houses, &c. The purchase-money is to be 25,000*l.*, payable in shares or cash, at the option of the directors; and it is mentioned that the vendors have undertaken to bear all expenses in connection with the formation and establishment of the company up to allotment, so that it will be relieved from any charges under the head of preliminary expenses or promotion money. The purchase will include the entire rights of the Ramsay Lead Mining and Smelting Company, at present existing under special Acts of the Canadian Legislature, and the cost of a new special Act for vesting such rights in the English company will be borne by the vendors. The duty of 20 per cent., now levied on the importation into Canada of bar and sheet lead and shot, suggests a considerable inducement for the proposed company to include ultimately this manufacture in their operations. It is considered that it will be unnecessary to call up more than 2*l.* per share to put the mine in a paying condition. Messrs. Willson and Robb, in their "Manual for Explorers," remark that the operations already effected "have established beyond a doubt the important facts that the galena occurs in true veins, which may be depended upon for persistence in depth, and that its quality is most excellent, producing 80 per cent. of metallic lead;" and this opinion is fully confirmed by Sir W. Logan, who declares that "no limit can be placed on the depth."

The prospectus for the issue in England of new shares in the Gold Company of the Approuague (Compagnie Orifere de l'Approuague), in French Guyana, appears in another column. The company was provisionally constituted as a Société Anonyme, in 1857, to be made definitive at the expiration of five years from the date. A capital of 80,000*l.*, in shares of 4*l.* each, has been issued, and 1*l.* paid upon them and expended; and, to relieve the shareholders in Cayenne from further calls, it is now proposed to issue another 80,000*l.* worth of shares in England, such new shares being of 4*l.* each, subject to payments of 20s. on application and 20s. on allotment. It is stated that 40,000*l.* worth of gold had been sent to France, whilst the supply of labour during the time it was raised had only varied from 80 to 120 men. The direction of the company has hitherto been at Cayenne, but will now be transferred to Paris.

The Cape of Good Hope Mining Company has, it is reported, proved successful beyond all expectation; although there are only 12,000 shares in all to be allotted, applications have been made for, and the deposit of 1*l.* paid upon, 37,362 shares. As will be seen from an advertisement in another column, the subscription list will close to-day.

On the Stock Exchange transactions in Mining Shares to a considerable extent have been effected during the week. The following quotations were officially recorded in British Mining Shares:—East Caradon, 44½, 44¾, 45¾, 46¼, 47½, 47, 46¾; Marke Valley, 8⅞; Wheal Seton, 245, 247½, 250, 240, 235, 238½; Devon Great Consols, 505; East Wheal Russell, 3¾, 4½, 4¾, 4⅝; Grambler, 15½; New Seton, 155, 150, 152; Tincroft, 13, 13½, 14; Wheal Ludcott, 9¼, 9⅜; Grenville, 5½; Herodsfoot, 49; North Wheal Basset, 3; Wheal Union, 6¼; Cambrian, 1, 1½; East Carn Brea, 11½; West Caradon, 28½. In Colonial Mining Shares the prices were:—Port Phillip, 1¾, 1½, 1¾; Yudanamutana, 3¼, 3⅜; Dun Mountain, ⅜, ½, ⅝; Scottish Australian, 1⅜, 1½, 1⅝; North Rhine, ⅜; Great Northern of South Australia, ⅜. In Foreign Mining Shares the prices were:—East del Rey, 2; Fortuna, 4½, 4¾; Linares, 7¼; Montes Aureos, 2⅜, 2½, 2¾; Santa Barbara, ⅞, 1; St. John del Rey, 55, 55½, 56; United Mexican, 5⅜, 5⅝; Lusitanian, 1⅞.

The closing quotations for shares in new undertakings were:—London and Northern Bank, ¼, ½ prem.; English and Irish Bank, ¼ dis. to ¼ prem.; Bank of Scinde, Punjaub, and Delhi, par; Bristol and South Wales Zinc Smelting, ½, 1 prem.; London, Birmingham, and South Staffordshire Bank, ⅛, ¼ dis.; Anglo-Portuguese Bank, ¼, ½ prem.; Midland Counties Union Bank, ¼, ½ prem.; Cannes Hotel, ¼, ½ prem.; British and Foreign Marine Insurance, ¼, ½ prem.; Approuague Gold Company, ¼, ½ prem. Vigra and Clogau shares closed at 30, 32; East Clogau, par to ¼ prem.; West Clogau, ¼ dis. to par; St. David's, par to ¼ prem.; Sovereign, par to ¼ prem.; St. Cuthbert's, ⅛, ¼ prem.; Nova Scotia, par to ¼ prem.; Dolfrwynog, par to ¼ prem.; East Cambrian, par to ¼ prem. Cape of Good Hope, ¼, ½ prem.; and Ramsey Lead Mining and Smelting Company, ¼, ½ prem.

IRISH MINE SHARE MARKET.—This has been a very active week, showing that public interest and confidence in mining speculations, where well managed, is greatly on the increase. Wicklow Copper Mining Company shares have made a further improvement of 10s. per share on their recent rise, and are now sought after at 39*l.* 10s. (5*l.* paid). The dividend on the shares of the Mining Company of Ireland having been realised, there is, of course, a slight reaction, and a drop of 2s. 6d. per share is the result of it; however, they are in fair request at 19*l.* 12s. 6d., ex div. Carysfort (20s. paid) improved 9d. per share on the day after the last half-yearly meeting of the shareholders, but this rise has not been sustained, the advance having receded to 6d. per share prem. Fully paid up shares were done at 40s., at which price they offer great advantage over the other class of shares, as the company will, no doubt, call up their capital in order to give their promising property a fair scope. Of Connorree shares there was rather a large supply in the market, and a fall of 1s. per share followed. But they are freely bought at 22s., or 10 per cent. prem. The General Mining Company for Ireland gave way 15s. per share during the week, but have slightly recovered, and are done at 5*l.* to 5*l.* 2s. 6d. (4*l.* paid). Castlewards, which made one quotation last week, are neglected now, and Carberys (Guatavallig) find no demand. As in last week's Journal we gave the principal item of the accounts which have since been produced at the respective half-yearly general meetings of the Mining Company of Ireland and of the Carysfort Mining Company, it is needless to refer to them again. In point of affording general satisfaction, the

meeting of the Mining Company of Ireland had naturally a great advantage, particularly as the dividend recommended by their directors, at the rate of 16 per cent. per annum, exceeded the previous one. Their Knockmahon Copper and Luganure Lead Mines, and their Slievardagh Collieries, are all in a profitable and most satisfactory state of working. The Lisnacan and Dromskeha Collieries, on the other hand, have fallen off in "out-put" 3095 tons, and in sales 2399 tons. Owing to a great reduction in the sale of culm, even at reduced prices, these collieries have created a loss of 308*l.* 15s. 7d.

BALLYCORUS LEAD-WORKS.—The nett profit from working this concern has been 1399*l.* 5s. 7d., a moiety of which has been transferred, as usual, to the "improvement fund." During the past half-year the sweepings of the new flue have been fully reduced, and have yielded a sum of 399*l.* 6s. 8d., in addition to the 1000*l.* placed to credit of this account last half-year, making a total of 1399*l.* 6s. 8d. realised from the flue for the year ended May 30, 1862.

KEELDRUM MINE.—Further operations have been carried on at this mine during the past six months, at a cost of 1650*l.* 10s. 8d., which has been reduced, by the value of ore raised from the mine within the past six months, to 1034*l.* 6s. 9d. The directors consider that this mine has now been fully tested; and having taken the opinions of some of the best mining authorities on the subject, they feel convinced that the prospects do not warrant any further outlay, and they have, therefore, determined on discontinuing operations.

In addition to the extracts and observations we made last week on the Carysfort Mining Company, is to be noticed a great improvement in Ballintemple Lead Mines, to which the able and eloquent Chairman alluded in his address as "the reason of the faith" that is in him. The verification, or otherwise, of the conflicting opinions of mining engineers on this part of the company's property ought by this time to afford the directors a pretty correct criterion by which to judge the capabilities of their advisers. The statement which we made last week of there being a reserve of about 200 tons of rich lead ore, and which fact is omitted from the "directors" and engineers' reports, has been confirmed by the Chairman. In his pleasant jocular mode he paid an ill compliment to St. Patrick, the venerated Patron Saint of our country, and their engineer alike. The former he insinuates left "serpents" behind him to be killed by Hercules, of whom the worthy Chairman is an excellent model, within a few inches; and of the latter he says he found something that glittered, but was discovered by Mr. Saunders not to be gold. On the whole, the directors, the Chairman, and the engineer all spoke hopefully of the company's prospects; and, as we have repeatedly said, we have no doubt the Carysfort Mines will yet give satisfactory results, if energetically and sytematically worked.

At the Redruth Ticketing, on Thursday, 2356 tons of ore were sold, realising 13,074*l.* 2s. 6d. The particulars of sale were:—Average standard 127*l.* 1s.; average produce, 6¼; average price per ton, 5*l.* 10s.; quantity fine copper, 153 tons 18 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 4	2273	£118 7 0	7⅜	£5 19 6	£81 0 0
„ 18	5078	126 16 0	6	4 16 0	80 15 0
„ 24	2393	125 16 0	6¼	5 3 0	81 19 0
Jan. 1	3156	126 2 0	6⅜	5 12 0	84 6 6
„ 8	2356	127 1 0	6½	5 10 0	84 18 0

Compared with last week's sale the advance has been in the standard 15s., and in the price per ton of ore about 1s. Compared with the corresponding sale of last month the advance has been in the standard 4*l.*, and in the price per ton of ore about 5s.

At the Swansea Ticketing, on Tuesday, 2220 tons of ore were sold, realising 26,279*l.* 2s. The particulars of the sale were—Average standard, 104*l.* 2s.; average produce, 13½; average price per ton, 11*l.* 16s. 6d.; quantity of fine copper, 299 tons 14 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
Dec. 2	1648	£ 97 11 0	18⅛	£15 19 6	£85 12 6
„ 16	1103	101 4 0	14⅛	12 11 0	86 12 0
Jan. 6	2220	104 2 0	13½	11 16 6	87 14 0

Compared with the last sale, the advance has been in the standard, 1*l.* 5s., and in the price per ton of ore about 3s. 4d. Compared with the corresponding sale of last month, the advance has been in the standard, 2*l.* 10s., and in the price per ton of ore about 6s. 9d. Of the 2220 tons sold on Tuesday, 515 tons were British ores, which gave an average produce of 9 1/16, and sold at an average standard of 111*l.* 5s. 6d.=7*l.* 17s. 6d. per ton of ore; the remaining 1705 tons were foreign ores, which gave an average produce of 14¾, and sold at an average standard of 103*l.* 4s. 6d.=13*l.* 0s. 6d. per ton of ore. On Jan. 20 there will be offered for sale about 1885 tons, from Cobre, Knockmahon, Cuba, Worthing Regulus, and Lochwinnoch.

[*Errata.*—In the reference to the sale of Dec. 16, the fine copper was stated 10 tons in excess; consequently the statements as to the variation in the standard and the price of fine copper in the ore were erroneous. There was an *advance* in the standard of 25s.]

At the East Caradon Mine meeting, on Wednesday (Mr. R. W. Childs in the chair), the accounts for the quarter showed a profit of 671*l.* A dividend of 614*l.* (1*l.* per share) was declared, leaving undivided assets amounting to 209*l.* Details in another column.

At Wheal Ludcott and Wrey Consols meeting, on Thursday, the accounts showed a profit on the three months' working of 251*l.* 4s. A dividend of 240*l.* (1*l.* per share) was declared. Capt. R. Knapp reported that the first point worthy of notice in the 60. in the western part of the mine, which has now been driven to the great cross-course, which will prove the quality of the western lode, and whether silver exists at the intersections as on the eastern lode. The next point of importance is the question of silver being found at the 96, where there are good indications. The only other important feature is the elvan course they are now passing in the lower part of the mine on the main lode, which he considers will favourably affect the lode. They have a good deal of lead ground laid open, accompanied with fair and reasonable chances of continued success.

At Wheal Basset and Grylls meeting, on Dec. 31, the accounts showed a credit balance of 174*3l.* 11s. The profit on the three months' working was 148*0l.* 17s. 7d. A dividend of 1000*l.* (1*l.* per share) was declared, and 743*l.* 11s. carried to credit of next account. Capts. Wilkin and Harris reported upon the various points of operation.

At South Wheal Frances meeting, on Monday, the accounts for Oct. and Nov. showed—Balance last audit, 2088*l.* 6s. 6d.; copper ore and tin sold and sundries, 2991*l.* 18s. 2d.=5080*l.* 4s. 8d.—Mine cost and sundries, 2319*l.* 9s. 5d.: leaving credit balance, 2760*l.* 15s. The profit on the two months' working was 672*l.* 8s. 6d. A dividend of 496*l.* (1*l.* per share) was declared, and 226*l.* carried to credit of next account. Capts. Pascoe, Prisk, and Pope reported upon the various points of operation.

At the Marke Valley Mine meeting, on Wednesday (Mr. W. Fawcett in the chair), the accounts for the quarter showed a profit of 96*3l.* A dividend of 2s. 6d per share was declared, leaving a balance of assets over liabilities of 2102*l.* 6s. 2d. The Chairman said that, although they had not paid so good a dividend to-day as upon previous occasions, yet they considered the elements in the mine warranted them not only in expecting a continuance of dividends, but a considerable improvement in the amount for the future. They would, during the present year, open the lodes at the 100 fathom level westward, where he had no doubt an immense deposit of ore would be laid open, which would last for some time.—A Shareholder enquired the reason of the decreased dividend?—The Chairman replied that it had arisen from the returns not having realised so much money, and the declension in the standard.—Capt. Seccombe explained that they had gone through an immense course of ore in the 90 fathom level, and that the shaft would be down to the 100 in about a month. It would, however, take four or five months before it was reached in that level. He was quite prepared to answer any question that shareholders might put with reference to the letter which appeared in the *Mining Journal* last week about the distance driven, and at the same time he might state that, if the [illegible]or who penned that letter knew the facts of the case, it never would have been [illegible]ten.—Mr. Peter Watson enquired if shareholders might hope to receive a dividend [illegible]2s. 6d. at the next meeting?—Capt. Seccombe said there could be no doubt upon that point; they were certain of a large quantity of ore of better quality, which would enable them to pay increased dividends.—Mr. Mundey enquired if it was customary in this mine to discount the ore bills?—The Chairman replied that the ore bills were paid into the bank as they were received, and that they were never discounted. After some further discussion, a vote of thanks was passed to the Chairman, which terminated the proceedings.

At North Downs Mine meeting, yesterday (Mr. R. Hallett in the chair), the accounts showed a balance of assets over liabilities of 110*l.* 9s. 7d. Capts. F. Pryor and John Grenfell reported upon the various points of operation. They will sample, on Tuesday, about the same quantity of ore as last, but of better quality. The ends are not rich, but the chances of discoveries are great; and, if the same mode be carried out as at present, by keeping a good staff of tutwork for the purpose of driving cross-cuts, the mine will soon be in as good a condition as ever. Details of the proceedings will be published next week.

At Grambler and St. Aubyn Mine meeting, on Jan. 6, the accounts for Oct. and Nov. showed a debit balance of 224*l.* 4s. 5d. The loss on the two months' working was 48*8l.* 3s. 5d. A call of 1*l.* per share was made. Capts. Davey and Michell reported upon the various points of operation.

At Wheal Nelson meeting, on Jan. 3 (Mr. C. Wescomb in the chair), the accounts for the year ending December showed a debit balance of 1039*l.* 16s. 2d. A call of 5s. per share was made. It was resolved that as one adventurer, holding 500 shares, is unable to meet his calls, the operations of the mine be suspended for the present, and that the captain be instructed to secure the lift. Capts. C. Thomas and Jos. Vivian were appointed to inspect and report upon the mine. Thanks were voted to Captain Lean for his ability and economy.

At the Vale of Towy Mine meeting, yesterday, a call of 1s. per share was made.

At the Carn Camborne Mine meeting, on Wednesday (Mr. J. Y. Watson in the chair), the accounts showed a debit balance of 161*l.* 11s. 1d. A call of 1s. 6d. per share was made.

At the West Rose Down Mine meeting, on Wednesday (Mr. Wrestbridge in the chair), the accounts from Oct. to Jan. showed a debit balance of 32*l.* 3s. 1d. A call of 15s. per share was made.

At the West Great Work Mine meeting, on Dec. 31, the accounts, including the October cost, showed a debit balance of 138*l.* 16s. A call of 1s. per share was made. It was resolved, that in the opinion of the meeting the reports of Captains J. Vivian and C. Thomas more than confirmed any report made by Captain Reed, the agent of the mine, as to the value of West Great Work sett. It was also resolved that Capt. Reed should proceed with all energy in the exploration of the mine, so that at the earliest possible period an engine might be erected, as that object had been so strongly recommended by Capts. Thomas and Vivian. Some of the shareholders being in arrear of calls, the purser was instructed to take such legal proceedings as he might think necessary for the recovery of the arrears.

The directors of the Don Pedro North del Rey Gold Mining Company have received advices that Capt. Thomas Treloar has concluded the negociations for the purchase of the gold mine. Capt. Treloar has applied for 1000 shares, and the directors have decided to issue the unallotted shares, *pro rata*, to the shareholders.

LEEDS, JAN. 8.—In Mining Shares the business done has been rather more active. Quotations in most descriptions of stock continue depressed, and to all appearance are likely to remain so until the accounts from the mines are verified by returns of ore sufficient, at any rate, to make some of them self-supporting.—JOHN GLEDHILL AND CO.

LEEDS, JAN. 8.—During the past week the Mining Market has been very firm, but without much business doing. The following shares have been enquired for—North Hallenbeagle, New and Old Wheal Prudence, Hebdon Moor, Cornubia, and Wensleydale. In consequence of the dividends on railways, &c., being now due, a considerable advance may be looked for in railways and mines.—EDWARD BROOKE, Mining Broker, 5, Bank-street.

A petition for winding-up the Keynsham Blue Lias, Lime, and Cemen Company (Limited) is to be heard before the Master of the Rolls on Nov. 17.

A petition for winding-up the New Brunswick and Canada Railway and Land Company (Limited) is to be heard before the Master of the Rolls on Jan. 17.

The list of contributories of the Patent Bitumenised Water, Gas, and Drainage Pipe Company (Limited) will be settled in the Bankruptcy Court on Jan. 21.

Mr. William Cash, accountant, of Moorgate-street, has been elected auditor of the Buenos Ayres Great Southern Railway Company, in conjunction with Mr. J. E. Wanklyn.

The firm of William Phillips, of the Coal Exchange, consignee of the Earl of Dudley's coal and iron, will be carried on in future under the style of William and Thomas Phillips.

From Lyons we learn that a successful experiment has been tried on the Saone of a boat with a machine moved by compressed air.

LANCASHIRE RELIEF FUND.—We have received from Mr. Thomas Gregory, of Calstock, 7*l.* 7s.; which was subscribed by the agents and men employed at the Drake Walls Mine, in aid of the distress in Lancashire. The amount has been paid to the Lord Mayor, at the Mansion House.

COAL MARKET.—On Monday, only 24 fresh ships having come forward, there was more disposition to purchase coal generally, and a considerable amount of business was done at last day's prices. Best house coal, 17s. to 18s.; seconds, 15s. 6d. to 16s. 6d.; Hartley's, 14s. to 14s. 6d.; Manufacturers', 13s. to 15s. per ton.—On Wednesday; 15 arrivals. The tone of the market was stronger, and fully last day's prices were realised for all descriptions of coal.—On Friday, only 15 ships arriving, and much colder weather, caused a brisk enquiry for both house and steam coal, and prices advanced 6d. per ton. Manufacturers' as before. Hetton's Wallsend, 18s. 6d.; Gosforth's Wallsend, 16s. 3d.; Tunstall's Wallsend, 16s. 3d.; Lambert's West Hartley, 15s.; Tanfield Moor, 13s. 6d.: 3 cargoes unsold:; 110 ships at sea.

LONDON COAL TRADE.—The total supply from all sources for 1862 was 4,977,351 tons 2 cwts., against 5,227,774 tons 17 cwts. in 1861, showing a diminution of 250,523 tons 15 cwts. Of this tonnage the Clay Cross pits, near Chesterfield, Derbyshire, have contributed 186,051 tons 17 cwts.; the Silkstone coal (Wharncliffe, Cooper, and Co., Newton and Co., Smith and Co., Clarke's, &c.), 156,734 tons 16 cwts.; and Codnor-park, 50,460 tons. The supply by railway has been 1,513,296 tons 2 cwts., or a decline of 129,206 tons 5 cwts., the quantity for 1861 being 1,642,502 tons 7 cwts. Of this large total the London and North-Western Railway are entered as carrying 666,131 tons 2 cwts.; Great Northern, 415,812 tons 13 cwts.; Midland, 156,362 tons; Great Eastern, 150,854 tons; and Great Western, 93,276 tons.

The Peninsular and Oriental Company purchased, during last year, the following supplies of coal for their foreign coal depots:—48,000 tons for Malta; 35,000 tons for Point de Galle; 43,000 tons for Aden; 16,000 tons for Singapore; 16,000 tons for Hong Kong; 21,000 tons for Alexandria; 4500 tons for Gibraltar; 19,000 tons for Bombay; 6000 tons for King George's Sound; 4000 tons for Shanghai; 3000 tons for Calcutta; 1500 tons for Mauritius; and 1000 tons for Sydney.

BRISTOL COAL TRADE.—During December 730 tons of coal were exported oversea from Bristol, as against 1544 tons in November, showing a falling off in the shipments last month of 814 tons. Taking the past year, however, we find that a tolerably good business has been done in the export coal trade at Bristol, although it is not generally classed as a coaling port, and were a little more energy displayed by the local coalowners this branch of business might be considerably extended. The shipments of coal during 1862 amounted to 12,392 tons, being an average of more than 1000 tons per month, and this, it must be remembered, is exclusive of the coal sent coastwise, of which we have no returns. The following are the places to which shipments of coal were made from Bristol in 1862:—Shanghai, 1147 tons; Quebec, 595; Bilboa, 135; Calcutta, 500; Trieste, 40; Portland (U.S.), 124; Harbour Grace, 317; St. John's (Newfoundland), 862; Bremen, 333; St. Michael's, 371; St. John's (N.B.), 198; Coneran, 155; Gaspe, 65; Prince Edward Island, 30; St. Vincent and Jamaica, 13; Barbadoes, 1906; Tobago, 271; Demerara, 1272; Copenhagen, 90; Cape de Verde, 1080; Nevis, 22; Smyrna, 36; Jersey and Guernsey, 408; Valencia, 111; St. Thomas, 200; Bermuda, 1100; New York, 412; Trinidad, 300; Rio de Janeiro, 276; Stettin, 22 tons.

GREAT GRIMSBY COAL TRADE.—Quantity of coal exported from the port of Great Grimsby during December:—To France, 5981 tons; to Hanseatic Towns, 2348; to Norway, 1442; to Ceylon, 1071; to Mecklenburg Schwerin, 517; to Spain, 1056; to Turkey, 329; to Italy, 746; to Prussia, 197; to Denmark, 99; and to Sweden, 88 tons. Total foreign, 13,874 tons; corresponding month of 1861, 6045 tons. Coastwise, 1275 tons; corresponding month of 1861, 795 tons. Grand total, 15,149 tons; corresponding month of 1861, 6840 tons. Increase, 1862, 8309 tons.

ACCIDENT AT THE PENDLETON COLLIERY.—On Sunday last an accident, fortunately unattended by loss of life, occurred at the Pendleton Colliery, belonging to Messrs. Andrew Knowles and Son. Some men were employed in wedging the tubbing, when a small portion of the wedging was blown out, and water began to run into the pit. Information was at once sent to the managers, Mr. S. Horrocks, and Mr. J. Knowles, who came to the pit immediately. The water was running into the pit in a stream, and measures were taken to stop it by getting long wedges of wood and iron, but it was not until one o'clock on Monday that the water was stopped. The furnaces and engine fires were put out as soon as the accident happened, and during the night sixteen ponies were brought out, as a matter of precaution, though they were not in immediate danger. The ventilation was reversed, but care was taken that the works were kept properly ventilated, only in the reverse course. The cause of the accident was the contraction of the tubbing in the upcast shaft, which had been cooled for the purpose of repairing. There is not much water in the pit, and the men and boys (300 in number) will be at work again in a few days. With reference to this latter statement, a correspondent, signing himself "Caution," has written to a local journal, stating that—"Probably there may not be much water in the pit, but in the outside of the iron tubbing there are immense quantities of water. Now, if the tubbing gives way, and the water rushes down the pit, some 435 yards in depth, how are the 300 men and boys to be got out? There used to be no communication with the adjoining pits, but it is to be hoped there is now, or the irruption of the water might cause a terrible loss of life." In order to allay the fears of "Caution," it may be stated that if the tubbing gives way the men and boys will come up the second shaft, which must be presumed to exist from the fact that the ventilation is stated to have been reversed. The pit is 535 yards deep, and the accident occurred about 100 yards from the top.

A COLLIERY ENGINEER COMMITTED FOR MANSLAUGHTER.—On Monday an inquest was held on Robert Littler, who was killed at the Sankey Brook Colliery, in Parr, at which Mr. Higson, the Government Inspector, was in attendance. Nine witnesses were examined, and from their evidence it appeared that when the engineer, Thomas Carter, went to his work on Thursday night, he was seen by several persons, and appeared to be in liquor. One lot of men were sent down by the prisoner, and some little irregularity occurred, the prisoner stopping and rising the cage alternately. Soon afterwards the deceased and one of the witnesses (Frederick Foster) got into the cage, and the engineer was signalled to let them down, but instead of that, he turned the engine the wrong way. Foster jumped out of the cage, and the deceased was pulled over the head gear and precipitated down the shaft, his right hand and one of his legs being cut off, and his brains dashed out. At the close the jury returned a verdict of "Manslaughter" against Thomas Carter, who was thereupon committed for trial at the next Assizes, bail being accepted for his appearance.

THE STRIKE AMONG THE WIGAN COLLIERS.—We have stated that the colliers employed by several firms in the Wigan district have asked that their wages may be increased by the 10 per cent. which was taken from them last spring. The notices given at the Earl of Crawford and Balcarras's collieries, and those at the pits of the Ince Hall Coal and Cannel Company, Ince, expired on Wednesday, and as the men had received no reply to their request, the whole of the Haigh men, and a portion of those employed at Ince, yesterday morning refused to commence work. A meeting was held at the Colliers' Arms, New Springs, yesterday, when it was determined to send a deputation to the manager of Earl Crawford's pits, Mr. A. Hewlett, for an answer to the "notice."—*Manchester Guardian.*

LEAD AND TIN.—We shall next week publish our usual Quarterly Returns of the produce of Black Tin and Lead, and shall feel obliged by pursers, and others interested, furnishing us with the necessary particulars, that the Returns may appear as correct as possible.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending January 4 was 11,170*l.* 0s. 10d.

LEAD ORES.

Sold on the 2d January.

Mines.	Tons.	Price per ton.	Purchasers.
Minera	100	£13 10 6	Walker, Parker, & Co
ditto	100	13 10 6	ditto
ditto	95	13 10 6	ditto
ditto	80	13 11 0	Mining Co. of Ireland.
ditto	80	13 13 6	Panther Co.
ditto	80	13 11 6	ditto
ditto	70	13 11 6	ditto
ditto	9	11 2 6	Locke, Blackett, & Co.

Sold on the 3d January.

Trelawny	60	27 9 0	—
ditto	50	10 2 6	—
Chiverton	60	19 2 6	Treffry's Trustees.

Sold on the 5th January.

Isle of Islay Mine	34	13 1 0	Walker, Parker, & Co.
East Logyias	55	12 19 0	Sims, Willyams, & Co.
Glogfach	65	15 18 0	Mining Co. of Ireland.
Cwmystwith	170	13 2 6	Panther Co.

Sold on the 6th January.

Wheal Mary Ann	50	27 8 6	Stock & Co.
ditto	35	13 5 0	Michell & Co.

Sold on the 8th January.

Maesyrerwddu	35¼	14 6 6	Walker, Parker, & Co.
Coetia Llys	45	14 7 6	ditto
Deep Level	12	12 12 0	Newton, Keates, & Co.
Brynford Hall	12	12 16 0	ditto
Rhosesmor	6	13 0 0	A. Eyton.
Parry's	30	13 12 6	Walker, Parker, & Co.
Bryn Gwiog	60	14 6 6	A. Eyton.
Long Rake	15	13 11 6	Walker, Parker, & Co.
Merllyn	5	12 0 0	ditto
Minera Union	12	13 5 6	Newton, Keates, & Co.
Llangynog United	24	13 0 6	ditto
Llanerchyraur	10	14 0 6	ditto
Roman Gravels	20	13 8 0	A. Eyton.

BLENDE.

Sold on the 2d January.

Mines.	Tons.	Price per ton.	Purchasers.
Minera	30	£2 12 6	A. Courage & Co.
ditto	55	2 18 0	ditto
ditto	20	1 17 6	ditto
ditto	20	3 13 6	W. Kenrick.

BLACK TIN.

Sold on the 1st January.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Wheal Hearle	3 13 2 17	£61 15 0	£ 227 8 0	Michell & Co.
ditto	0 12 0 8	62 0 0	57 8 5	ditto

COPPER ORES.

Sampled December 17, and sold at Swansea January 6.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobre	98	13¾	£11 7 6	Cuba	100	10⅝	£9 5 0
ditto	94	14	10 19 6	ditto	95	10¼	8 19 0
ditto	80	14	11 10 0	ditto	14	71/8	58 15 6
ditto	96	14¼	11 8 0	ditto	90	10⅜	9 3 0
ditto	88	14⅜	11 11 0	ditto	76	10¾	9 3 0
ditto	87	14⅝	11 17 0	ditto	65	18⅜	16 5 6
ditto	63	14	11 12 0	ditto	32	16¾	14 4 6
ditto	46	24	21 1 6	ditto	4	80¼	68 15 0
ditto	38	24	20 10 0	Berehaven	90	10½	9 4 6
ditto	8	17⅜	14 18 6	ditto	62	10¼	9 4 6
ditto	9	55¼	47 1 6	ditto	108	11⅜	9 15 0
ditto	92	13⅞	11 11 0	Laxey	84	3½	2 6 0
ditto	86	14	11 10 6	ditto	55	7½	6 9 0
ditto	85	14⅛	11 12 0	Knockmahon	95	9⅜	8 12 6
ditto	84	14	11 5 0	Melbourne	17	18⅜	15 6 6
ditto	62	14	11 6 0	Copper Slag	17	10	11 7 0
ditto	36	24	20 18 6	Swedish	14	2¼	1 7 0
ditto	32	24	21 1 0	Kanmantoo	6	55¼	48 11 0
ditto	8	62	50 5 6	Holyford	4	11⅜	9 11 6

TOTAL PRODUCE.

Cobre	1182	£15,749	10 5	Melbourne	17	£260	10 6
Cuba	476	5,905	1 6	Copper Slag	17	192	19 0
Berehaven	260	2,455	4 0	Swedish	14	18	18 0
Laxey	139	847	19 0	Kanmantoo	6	291	6 0
Knockmahon	95	819	7 6	Holyford	4	38	6 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Copper Miners' Company	112	£1380	6 0
Freeman and Co.	245½	2301	12 6
P. Grenfell and Sons	318	3794	19 6
Sims, Willyams, and Co.	76	1928	13 0
Vivian and Sons	373½	3657	4 6
Williams, Foster, and Co.	470	4999	15 0
Mason and Elkington	117	2038	15 6
Bankart and Sons	240½	3338	9 0
Sweetland, Tuttle, and Co.	95	819	7 6
Jennings and Co.	85	1184	17 0
Neath Copper Company	87½	885	2 6
Total	2220	£26,279	2 0

Copper ores for sale at Swansea, Jan. 20.—Cobre 103, 100, 99, 98, 84, 104, 102, 97, 94, 105, 92, 83—Knockmahon 62, 59, 81, 68, 68, 67, 97, 89—Cuba 84—Worthing Regulus, S.A., 37—Lochwinnoch 12.—Total, 1885 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	9 1-16	£ 7 17 6	£111 5 6
Foreign	14¾	13 0 6	103 4 6
Sale	13½	£11 16 6	£104 2 0

Totals—British, 515; Foreign, 1705=2220 tons (21 cwts.)

COPPER ORES.

Sampled Dec. 24, and sold at Tabb's Hotel, Redruth, Jan. 8.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Basset	87	£10 13 6	Tolvadden	42	£5 1 0
ditto	80	4 8 6	ditto	36	3 5 6
ditto	77	3 11 6	ditto	32	3 11 0
ditto	72	5 15 0	Wheal Margery	45	2 9 0
ditto	61	5 9 6	ditto	41	7 14 6
ditto	54	7 16 6	ditto	39	1 13 6
ditto	33	3 19 0	ditto	5	11 9 0
ditto	1	25 7 6	East Rosewarne	38	7 18 6
East Carn Brea	61	5 19 6	ditto	35	12 19 6
ditto	52	4 16 0	ditto	22	3 1 6
ditto	51	6 9 6	ditto	20	9 1 6
ditto	50	8 16 6	Prosper United	47	5 19 6
ditto	48	7 10 6	ditto	32	1 10 0
ditto	39	7 2 0	ditto	26	5 1 0
ditto	38	6 14 0	Copper Hill	42	1 12 6
ditto	37	7 3 0	ditto	30	6 19 0
ditto	23	3 10 6	ditto	29	2 1 6
ditto	17	4 11 6	North Basset	38	3 2 0
ditto	15	4 6 6	ditto	24	4 6 6
Alfred Consols	76	3 17 6	ditto	22	7 2 6
ditto	68	4 9 6	South Crenver	57	2 1 6
ditto	45	3 10 6	ditto	21	6 9 6
ditto	43	4 18 0	Wheal Buller	39	3 14 0
ditto	41	1 12 0	ditto	12	12 10 0
ditto	33	1 16 6	Wheal Agar	47	5 13 0
Par Consols	70	9 13 6	Gurlyn	24	4 15 0
ditto	66	6 11 6	ditto	23	6 2 6
ditto	65	7 14 0	West Trevelyan	23	10 0 0
Tolvadden	44	3 18 6	South Carn Brea	18	4 2 6

TOTAL PRODUCE.

West Basset	465	£2884	5 0	Copper Hill	101	£536	18 6
East Carn Brea	431	2765	6 6	North Basset	84	378	7 0
Alfred Consols	306	1093	19 0	South Crenver	78	254	5 0
Par Consols	201	1611	14 0	Wheal Buller	51	294	6 0
Tolvadden	154	616	6 0	Wheal Agar	47	265	11 0
Wheal Margery	130	549	11 0	Gurlyn	47	254	17 6
East Rosewarne	115	1004	8 6	West W. Trevelyan	23	230	0 0
Prosper United	105	460	2 6	South Carn Brea	18	74	5 0

Average Standard..... £127 1 0 | Average Produce..... 6⅛

Average Price per ton..... £5 10 0

Quantity of Ore ..... 2356 tons | Quantity of Fine Copper, 153 tons 18 cwts.

Amount of Money £13,074 2 6

LAST SALE.—Average Standard..... £126 2 0.—Average Produce 6⅝

Standard of corresponding sale last month, £118 7 0.—Produce, 7⅞.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	177½	£1308 11 3
Freeman and Co.	129	781 2 0
Grenfell and Sons	275	2078 6 6
Crown Copper Company	23½	127 8 9
Sims, Willyams, and Co.	456	2802 9 0
Williams, Foster, and Co.	274½	1584 1 6
Mason and Elkington	394	2130 19 0
Bankart and Sons	84	278 18 6
Copper Miners' Company	179	963 10 6
Charles Lambert	118	340 17 6
Sweetland, Tuttle, and Co.	213½	604 11 3
Neath Copper Company	32	173 6 9
Total	2356	£13,074 2 6

NO SALE on Thursday next, January 15.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro—Mines and parcels.—Devon Great Consols 2114—Phœnix 506—East Caradon 475—Marke Valley 420—Hingston Down 390—Great Wheal Martha 269—East Russell 238—Helmbuish 204—Bedford United 200—Wheal Edward 175—Wheal Friendship 152—Kelly Bray 141—Lady Bertha 136—Wheal Emma 130—Gawton 94—Calstock Consols 84—Brookwood 75—Gunnis Lake (Clitters) 60—Fursdon 43—Hawkmoor 23—Total, 5926 tons.

GOLD COMPANY OF THE APPROUAGUE, FRENCH GUYANA.

Established at Paris as a "Société Anonyme," by Imperial Decree of the 28th May, 1858.

Concession of 200,000 hectares (500,000 acres) of auriferous land.

The French Government, being desirous of encouraging the development of the mineral wealth discovered within the last few years in French Guyana, granted in the year 1857 to this company a concession of 200,000 hectares (500,000 acres) of land, situated at the foot of the mountain of Alcoupale, in the immediate neighbourhood of the River Approuague, for the above-mentioned purpose, and also for that of colonisation, in the expectation that the pursuit of the mineral branch of industry would give a value to the adjoining lands, and lead to the formation of settlements there for agricultural purposes.

It was a condition of the granting this privilege by the Government that the concession should not be considered definitive until the expiration of five years from its date, and that in the meantime no negociation of its shares should take place, nor any quotation of them be permitted at the Bourse, in order to prevent the undertaking becoming an object of speculation until the existence and value of the auriferous deposits should be ascertained by actual experience.

This has now been done, with very satisfactory results. It is now proved that the auriferous beds of French Guyana contain a large deposit of gold, and that the average produce obtained from them during four years' working is equal to that of California per man per day.

The auriferous deposit is of a thickness varying from 25 centimètres (9¾ inches) to a mètre (39 inches). It is found at a depth of only 75 centimètres (29 inches) from the surface. The gold is obtained by washing, without any chemical manipulation.

With a supply of labour ranging from 80 to 120 men, the company has sent to France more than 300 kilogrammes of gold, of the value of about 1,000,000 frs.

The quality of the gold is pure. The last remittance received in Paris produced 3344·51 frs. the kilogramme. The value of fine gold is 3348 frs. the kilogramme.

The direction of the works has been, since 1858, conducted by Lieut.-Col. Charrière, of the French Infantry of Marine, with the express sanction of the French Government. This gentleman, who has come from Guyana to Paris for the purpose of affording information on the condition and prospects of the company, has presented to the directors an elaborate report thereon, a summary of which will be found annexed.

Colonel Charrière has passed 15 years in the colony of Guyana, in the service of the French Government.

The following has been the produce of gold from the commencement of the workings:—

In six months of 1857	11·879	kilogrammes.
In the year 1858	41·088	"
" 1859	54·495	"
" 1860	72·247	"
" 1861	81·338	"

The value of the kilogramme is about £130.

Four separate stations have been established, where the workings are carried on. The only limit to the production of gold appears to consist in the number of hands employed; any number of men from 1000 up to 5000 can be employed.

There is another important element in the company's concerns to be adverted to—the agricultural branch. The company has purchased a sugar plantation, called "La Jamaique," for the purpose of having a station to which to send any of the workpeople or their families who might require a change of labour, and also to form a base for agricultural operations, to be gradually extended as circumstances permit. It is a primary consideration with the company to secure a supply of provisions at reasonable prices for its workmen; and it hopes, by offering land to agriculturists on reasonable terms, to encourage them gradually to settle on their lands. The increase in the company's labourers will give a continually increasing demand for the produce of the farmer.

The estate of La Jamaique has cost	140,000	francs.
Of which there remain to be paid by annual instalments	84,000	"
But the establishment, in consequence of the outlay made upon the buildings and other improvements, is worth at this time full	300,000	"

The capital created by the company at its formation was 20,000 shares, of 100 frs. (£4) each. On these shares 25 frs., or £1 per share, was paid; and this sum, £20,000, has been expended in forming the several working establishments, providing dwellings and a hospital for the workmen, importing labourers, and the acquiring the plantation of La Jamaique. As is the case in the formation of all new undertakings, much money has doubtless been spent that subsequent experience would have avoided. The shares were in the first instance allotted chiefly to residents in Guyana, the French Government being desirous that every inhabitant of that colony who should desire it should have this opportunity of being interested. But in order to avoid pressing upon these shareholders in the colony by further calls for money, it has been determined to create 20,000 additional shares of 100 frs. (£4) each, on the following conditions:—

20s. per share to be paid on application; 20s. ditto on allotment; the remainder, if required, at such periods as the directors may decide, in calls of not more than 25 frs. (20s.) per share at one time, and at an interval of not less than two months between each call; but no call shall be made until after a dividend shall have been paid out of profits of not less than 10 per cent.

It will be perceived that the capital now to be subscribed will be devoted wholly to the further prosecution of the undertaking; no part of it is to be applied to reimbursing any of the expenses already incurred. The shareholders by whom that outlay has been made will only be remunerated, out of any dividends which may be made of profits, in proportion to the payment they have made. The statutes of the company provide that whenever dividends are made they shall only be paid in proportion to the amount paid on each share.

If the holders of the 20,000 original shares shall pay an additional instalment of 25 frs. (£1) per share they will be entitled, on the payment of dividends, to rank in proportion to such payment.

The main purpose for which capital is required is the importation of labour. There are at present only 120 men at work. The French Government requires, as a condition of the confirmation of the concession, that 500 immigrants shall be introduced during the first year, and 250 during each of the two following years. But the interest of the company requires, without confining itself within these limits, that the supply of labourers shall be increased from time to time, as fast as proper accommodation can be found for them and their families. The company has at present offers from competent parties to place in Guyana several hundreds, from China or India, under engagements to serve the company for eight years, at fixed wages, nourishment, and lodging.

The seat of the direction of the company has hitherto been at Cayenne; it is now to be transferred to Paris. The members of the counseil d'administration (board of directors) there, being desirous of availing themselves of the experience which has been gained in England of the working of gold companies, have incorporated into their body two directors of the St. John del Rey Mining Company and the Port Phillip Company. The counseil d'administration will, therefore, be composed as follows:—

The MARQUIS DE BEAUMONT, Paris.
Mons. A. COTTIN (Lahens, A. Cottin, and Co., of Guadaloupe), Paris.
Mons. EMILE D'ERLANGER, Banker, Paris.
Mons. LE PELLETIER DE ST. REMY, late Auditor of the Council of State, Agent-General of Colonial Banks, Paris.
Mons. FRANCONIE (of Cayenne), Merchant, Paris.
Mons. MALAVOIS, Shipowner, Paris, late Member of Council at La Réunion.
Sir CHARLES H. J. RICH, Bart. (Director of the Port Phillip Company).
J. D. POWLES, Esq. (Chairman of the St. John del Rey Company).

SUPERINTENDENT AT CAYENNE—Lieut.-Col. A. Charrière.

The St. John del Rey Company, working in Brazil, has, with a capital of £125,000, paid to its shareholders dividends amounting to £602,250, besides forming a reserve fund of £40,000; and it is still producing a profit of upwards of £80,000 per annum. The Port Phillip Company, working in Australia, is paying dividends of 20 per cent. per annum.

The French Government is now ready to perfect the concession, provisionally granted in 1857, on the additional capital being subscribed.

BANKERS.

In London ..... The Imperial Bank, Lothbury.
In Paris ..... Messrs. E. d'Erlanger and Co.

BROKERS.

Messrs. Laurence, Son, and Pearce, Auction Mart, London, E.C., where forms of application for shares may be obtained.

THE CAPE OF GOOD HOPE COPPER MINING COMPANY (LIMITED).

To be incorporated under the Companies Act, 1862.

Capital £150,000, in 15,000 shares of £10 each.

Deposit on application £1 per share, and on allotment a further payment of £1 per share. Calls not to exceed £2 per share, at intervals of three months.

DIRECTORS.

WILLIAM BEVAN, Esq. (Messrs. Wm. Bird and Co.), 2, Laurence Pountney-hill.
P. G. VAN DER BYL, Esq. (Messrs. Van der Byl and Co., Cape Town), 3, Upper Hyde Park-gardens.
OSGOOD HANBURY, jun., Esq. (Messrs. Hanburys and Lloyds), 60, Lombard-street.
EDWARD JENNER JERRAM, Esq. (Messrs. Wm. Venning and Co.), 12, Pancras-lane.
WILLIAM KEATES, Esq. (Messrs. Newton, Keates, and Co.), Liverpool.
JOHN KING, Esq. (Messrs. Phillips, King, and Co.), Fowkes-buildings, Tower-street.
EDMUND A. PONTIFEX, Esq. (Messrs. Pontifex and Wood), Farringdon Works, Shoe-lane.
JOHN TAYLOR, jun., Esq., 6, Queen-street-place.
RICHARD TAYLOR, Esq., 6, Queen-street place.

AUDITORS—James Anderton, Esq., 20, New Bridge-street; Robert Henty, Esq., 40, Brunswick-square, Brighton.
BANKERS—Messrs. Hanburys and Lloyds, 60, Lombard-street, E.C.
SOLICITORS—Messrs. John and William Galsworthy, 12, Old Jewry Chambers.
MANAGERS.
Messrs. John Taylor and Sons, 6, Queen-street-place, Upper Thames-street.
MANAGER AT THE CAPE OF GOOD HOPE—Henry Steele, Esq.
BROKERS—Messrs. Hichens, Harrison, and Co., 21, Threadneedle-street.
SECRETARY—W. Vernon Venables, Esq.

OFFICES,—6, QUEEN STREET PLACE, UPPER THAMES STREET, LONDON.

This company is formed for the purpose of acquiring by purchase, from Messrs. Phillips, King, and Co., the present proprietors, large tracts of land in the district of Namaqualand, Cape of Good Hope, with the extensive copper mines thereon, and continuing the working of the said mines.

Mining operations have been carried on since 1853 by the present proprietors, and the sales of copper ores at Swansea have been 18,999 tons, realising £515,752, leaving a profit of £115,000.

Detailed prospectuses, showing the terms of purchase, the nature of the property, and the course intended to be pursued for its further development, may, with forms of application for shares, be obtained at the offices of the company, or of the brokers, Messrs. HICHENS, HARRISON, and Co.

At date of the last advices, November 14, the mines were yielding well, and 2400 tons of ore were on the beach, a large portion of which will come under the arrangement made between the vendors and the company.

THE CAPE OF GOOD HOPE COPPER MINING COMPANY (LIMITED).

THIS IS THE LAST DAY for RECEIVING APPLICATIONS FOR SHARES in this company. By order of the Board, W. VERNON VENABLES, Sec.
6, Queen-street-place, Upper Thames-street, London, E.C.

ASSAYS AND ANALYSES OF ORES, METALS, MANURES, &c., on the most moderate terms, and with the utmost accuracy.

List of fees per post, on application.
JOHN LONGMAID, CITY LABORATORY AND ASSAY OFFICE,
31, THROGMORTON STREET, E.C.

TYWARNHAILE MINE.

In 6000 shares. On the "COST-BOOK SYSTEM."

£30,000 of capital has been expended in plant and bringing the mine into working order, making £5 per share, and all the shares are alike subject to calls.

Any shareholder can at any time determine his own liability by relinquishing his interest.

COMMITTEE OF MANAGEMENT.

The Right Hon. the EARL OF SHREWSBURY AND TALBOT.
Lieut.-General C. MURRAY HAY, 4, Lower Belgrave-street.
C. SEALE HAYNE, Esq., Fuge House, Devon, and 41, Victoria-street, Westminster (Chairman of the Dartmouth and Torbay Railway Company).
J. H. MACKENZIE, Esq. (Deputy-Chairman of the London and Lancashire Life Assurance Company).
CHARLES P. FROOM, Esq., 4, Cambridge-square, Hyde Park (Director of the Shropshire Mineral Railway Company).

BANKERS.

The Alliance Bank of London and Liverpool (Limited), Lothbury, London, and Albany, Liverpool.

BROKERS.

London ..... Messrs. Froom Brothers, 20, Change-alley, Cornhill, E.C.
Liverpool .... Messrs. Tinley and Son.

LONDON MANAGER.

J. H. Murchison, Esq., 117, Bishopsgate-street Within.

OFFICES,—117, BISHOPSGATE STREET WITHIN, LONDON.

The Tywarnhaile Mine is situate in the parish of St. Agnes, near Redruth, one of the most productive and profitable mineral districts in the county of Cornwall.

In the year ending June, 1851, there were sold from the mine 6423 tons of copper ore, and in the nine months ending March, 1852, the quantity sold was 4035 tons.

The mine was then stopped, owing to the depressed standard of copper at that time, and the consequent low prices received for the ores.

The present proprietors have lately expended a large sum in draining the mine, and in bringing it into working order, the machinery and plant alone having cost £13,000.

During the time that they have been clearing up the old works, and have been laying out a large dead expenditure of a permanent character, they have sold about £20,000 worth of copper ore, the quality of which considerably improves in the deeper levels.

The bottom of the mine (100 fms.) has only recently been reached; but the returns are already nearly 300 tons of ore per month, and it will be seen from the annexed report of the managing agent that an additional 100 tons per month of the best quality will, without difficulty, be shortly obtained, and there is little doubt but that even these returns will be gradually increased.

The mine is held under lease from the Duchy of Cornwall, at the very low rate of 1-24th royalty.

The capital required being larger than was originally contemplated the present proprietors have resolved to constitute the company on the Cost-book System, in 6000 shares, and to offer a limited number of these to new parties.

The 6000 shares will be credited with £5 per share, being at the rate of the past cash expenditure from capital alone (excluding the proceeds of the ore re-spent), and of these shares 2000 are retained by the present proprietors, who also subscribe for 2000 more at £5 per share, leaving only 2000 for disposal at that price, and a portion of these are already applied for. For the convenience of purchasers a deposit of £1 per share will be received, and the remaining £4 in equal quarterly instalments; but if paid within one month of the payment of the deposit, discounts of 2½, 5, 7½, and 10 per cent. respectively on the instalments will be allowed. The sale of these shares will clear the mine of every liability, and give a good balance for working. Should further calls be required, the whole of the shares will bear the same alike.

It will be seen that by this arrangement no premium or profit is asked, and that new parties come into an undertaking apparently on the eve of realising handsome profits, having saved the long and tedious delay necessary to the completion of extensive surface works and heavy underground operations.

The mine being well found in powerful and substantial machinery, the capital required for future expenditure will be almost entirely applied to opening up and developing the lodes already yielding so largely, and any others that may be discovered.

The following figures show the large profits realised by copper mining, when at all successful, and the great productiveness of the lode at Tywarnhaile encourages the probability of at least equal results at that mine:—

Name of Mine.	Amount paid per share.	Present price per share.	Dividends paid per share.
Carn Brea	£15 0 0	£ 65 0 0	£273 10 0
Devon Great Consols	1 0 0	500 0 0	826 0 0
East Caradon	2 15 0	45 0 0	5 17 6
East Basset	29 10 0	50 0 0	105 0 0
South Caradon	1 5 0	400 0 0	390 0 0
South Wheal Frances	19 0 0	97 10 0	364 0 0
West Basset	1 10 0	13 0 0	23 0 0
West Caradon	5 0 0	31 0 0	101 0 0
West Seton	47 10 0	290 0 0	363 0 0
Wheal Basset	5 2 6	85 0 0	590 0 0
Wheal Buller	5 0 0	55 0 0	929 0 0

Applications for the shares undisposed of, may be made in the accompanying form, to the London manager at the office, 117, Bishopsgate-street-within, E.C., or to the brokers, from all of whom prospectuses with report can be obtained.

London, Jan., 1863.

FORM OF APPLICATION FOR SHARES.

To the Committee of Management of the Tywarnhaile Mine,
In 6000 shares, on the "Cost-book System."

I beg to inform you that I will take and accept shares in the proposed company for working the above mine, to be established on the "Cost-book System," or any less number that may be allotted me, on the terms and subject to the conditions named in your prospectus of January, 1863, and I undertake and agree to pay the deposit of £1 per share on such shares, being £ , into the Alliance Bank, Lothbury, London, or the Albany, Liverpool, to the credit of the company, within 14 days after notice of the allotment by the committee of management has been sent to me by post.*

Name .....
Address .....
Profession .....

* If the other instalments are to be paid in advance, deducting the discounts, please add this intention.

TREGURTHA DOWNS AND OWEN VEAN CONSOLS MINING COMPANY (LIMITED).

ST. HILARY AND PERRANUTHNOE, CORNWALL.

Capital, £40,000, in 16,000 shares, of £2 10s. each.
Deposit, 5s. per share on application, and 15s. on allotment.

BANKERS.

Union Bank of London, Princes-street.
Messrs. Vivian, Grylls, Kendall, and Co. Helston.
Messrs. Bolitho, Sons, and Co., Penzance.

SOLICITORS.

H. Grylls Hill, Esq., 17, Barge-yard Chambers, London.
Messrs. Grylls, Hill, and Hill, Helston.

LONDON MANAGERS—Messrs. Dunsford and Ranken, 9, Broad-street-buildings.

These mines are in a district in Cornwall, which has yielded copper and tin worth from £8,000,000 to £10,000,000 sterling.

The reports are unusually numerous and favourable, and by miners of the highest reputation.

Detailed prospectuses, with maps, plans, reports, forms of application, and all information may be obtained of Messrs. Dunsford and Ranken, No. 9, Broad-street-buildings, and will be forwarded by post on application.

THE ROARING WATER MINING COMPANY (LIMITED).

Incorporated pursuant to the Joint Stock Companies Acts, 1862.

Capital, £18,000, in 6000 shares of £3 each.
10s. to be paid on application, and 10s. on allotment.

DIRECTORS.

Sir JAMES DOMBRAIN, Monkstown, and 20, Molesworth-street, Dublin.
Colonel BUSH, 55, York-terrace, Regent's Park (Director of the Oriental Inland Steam Navigation Company).
CHARLES T. HAWKINS, Esq., 12, Broad-street, Oxford (Director of the St. Just Mines).
WILLIAM OGILVIE, Esq., Cushion-court, Old Broad-street (Director of the St. Just Mines).
Captain PAUL, Queen's-road, Bayswater (late of the Knockmahon Mines).
H. CHURCHILL, Esq., Deddington, Oxfordshire (Director of the Strand Hotel Company).

BANKERS—London and County Bank, Lombard-street.

SOLICITORS.

Messrs. Meyrick and Gedge, 4, Storey's Gate, Great George-street, Westminster.

AUDITORS—Messrs. Cooper Brothers, public accountants, George-street, Mansion House.

BROKERS.

Messrs. Webb and Geach, 8, Finch-lane, Threadneedle-street, London.
Messrs. J. and J. Stephens and Son, 44, Dame-street, Dublin.
Robert M'Ewen, Esq., Dacie-buildings, Bank-street, Manchester.

MANAGER—Mr. Thomas Cooper Smith.

OFFICES—5, WARNFORD COURT, THROGMORTON STREET, CITY.

The object of this company is to work the copper mines of Roaring Water, situated in the county of Cork, a district well known among mineralogists as being rich in mineral deposits. The sett extends over 1½ mile in length, and ¾ of a mile in breadth, and is held for a term of 31 years from July last, at a royalty of 1-18th, with a clause for renewal, on payment of a comparatively small fine at the end of that period, for the same term.

The promising character of the mines proposed to be worked by the present company fully warrants the expectation that early returns will be realised; there are 19 well-defined lodes upon the sett, composed principally of yellow and peacock copper ores, rich specimens of malachite, friable quartz, and gossan of the finest description, from which many tons of rich ore have been taken, which on assay have been found to contain a large proportion of silver, and strong traces of gold. These lodes beyond all doubt are a continuation of the rich veins of copper now working with such great promise and success at the Schull Bay, Cappagh, and Ballycummisk Mines, all of which there can be no reasonable doubt are a continuation of the Berehaven lodes, which have returned enormous profits.

The several reports are from men of long practical experience, their testimony as to the highly-promising character of the property, and the great local advantages by which it is surrounded will be read with interest, and leave nothing to be urged by the directors, except an assurance of their strong confidence as to its value, and that this property will bear comparison with any of the rich mines opened in the district.

A large portion of the capital has been subscribed.

Applications for shares to be made to the bankers, directors, solicitors, brokers, and the manager, at the office of the company, where prospectuses and forms of application may be obtained; also reports on the mines from Capt. HENRY THOMAS; Capt. PAUL, late of the Knockmahon Mines; Capt. CARTHEW, of the St. Just Mines; Capt. MARTIN BOUNDY, of Dublin; and Capt. JAMES HOSKING, late of the South Cork Mines.

THE ROARING WATER MINING COMPANY (LIMITED).—

APPLICATIONS FOR SHARES in this company will be RECEIVED UNTIL the 15th JANUARY, 1863. THOS. COOPER SMITH.
5, Warnford-court, Throgmorton-street, London.

THE RAMSAY LEAD MINING AND SMELTING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, and to be empowered under Special Act of the Canadian Legislature.

Capital £100,000, in 20,000 shares of £5 each.
Deposit on application 5s. per share, and a further payment of 5s. per share on allotment.
Calls not to exceed 10s. per share, nor to be made at intervals of less than two months.
It is not expected that more than £2 per share will be required.

DIRECTORS.

HENRY HAYMEN, Esq., Chairman of the Nerbudda Coal and Iron Co.—CHAIRMAN.
GEORGE FREDERICK ANDERSON, Esq., 34, Nottingham-place, Regent's-park.
JAMES A. FOOT, Esq., 10, King's Bench-walk, Temple.
RALPH LEESON, Esq., Gwydir House, Cambridge.
Major-General DOWNING, 36, Gloucester-terrace, Hyde-park.
JAMES KIRK, Esq., 16, Great Queen-street, Lincoln's Inn.
JOHN WILLIAMS, Esq., 47, Mark-lane.

BANKERS—The Metropolitan and Provincial Bank (Limited).
SOLICITORS—Messrs. Howard, Dollman, and Lowther, 141, Fenchurch-street.
BROKERS—Messrs. Griffith and Druett, 23, Tokenhouse-yard.
AUDITOR—G. A. Hillier, Esq., Secretary San Paulo Brazilian Railway, 111, Gresham House.
SECRETARY (pro tem.)—Mr. F. Henderson Grieve.

TEMPORARY OFFICES,—17, ABCHURCH LANE, E.C.

The object of this company is to purchase and work the Ramsay Lead Mine, Canada West, and generally to acquire and work such mineral rights and properties in Canada, as the Ramsay Lead Mining and Smelting Company is authorised by the Special Acts of the Colonial Legislature, 22 Vic., c. 112, and 25 Vic., c. 76.

The Ramsay Lead Mine is situated on Lot 3 in the Sixth Concession of the township of Ramsay, county of Lanark, C.W., within three-quarters of a mile of the Brockville and Ottawa Railroad, and about 4 miles by rail from the Rideau Canal, connecting the St. Lawrence and Ottawa Rivers, in an old, settled, and thickly-populated country, where labour, provisions, and fuel are abundant and cheap, the climate exceedingly healthy, and the facilities for carrying on mining operations in every respect highly favourable.

The mining rights extend over 100 acres of land, and are amply secured by carefully prepared deeds. The portions of the property through which the main lode runs, and on which the buildings are erected, are held in fee simple.

The main lode occurs at the surface in grey limestone, or calciferous sand rock, and has been proved more than 1000 ft. in length, with a breadth of from 3 to 5 ft., the ore accruing as galena, in calcareous spar in pipe veins, and occasionally in large masses in vughs, associated with an unusual amount of very promising gossan. It is intersected throughout the length that has been explored by numerous lateral branches, several of which are of considerable size and promise, and by a caunter lode shown on the plan, which, so far as explored, appears to be of equal value with the main lode. The gangue of the lodes is soft and friable, yielding readily to the pick, and seldom requiring the aid of powder. The great breadth of the lode obviates the necessity of disturbing the inclosing rock, and greatly facilitates and diminishes the cost of working.

The geological character of the district and a full description of the lode are given in the extract from Sir William Logan's report to the Canadian Legislature, founded upon an elaborate survey by that eminent geologist of the Ramsay Lead Mine, and the district in which it is situated; and in the report of Captain Plummer, manager for the Messrs. John Taylor and Sons, of London, at the Wellington and Copper Bay Mines, on Lake Huron, both of which may be seen at the offices of the company.

The operations hitherto have been confined almost entirely to exploration on the back of the lode, to test its extent and character, affording an unusual amount of ore from such shallow workings, at a very small outlay. The engine-shaft has been sunk 8 fms., with every indication of the lode improving with depth.

An engine and smelting-house have been erected, with furnaces, stacks, flues, dwelling-houses for the men employed, blacksmiths' shop, and other buildings. The plant consists of two steam-engines—one 50 and one 12-horse power; crusher, pumps, furnaces, and other necessary tools and articles of equipment. Competent miners have declared the mine to be unusually rich at surface, and Sir William Logan, the provincial geologist, declares that "no limit can be placed to its depth." It is reasonable, therefore, to anticipate that in this, as in all deep mines, the amount of ore will increase as the workings are carried down, and that the Ramsay Mine will become one of the richest, as it is one of the most favourably situated, in the world.

The Ramsay Lead Mining and Smelting Company has been incorporated by the Provincial Legislature with large privileges; it possesses power to carry on mining of all ores and minerals, not only at Ramsay, but throughout Canada; and to deal in and manufacture all metals, ores, and their products.

It is intended to purchase the rights of the Ramsay Lead Mining and Smelting Company, in accordance with the terms of the original Act of the Colonial Legislature, 22 Vic., c. 112, and the amended Act 25 Vic., c. 75; and a Special Act of the Canadian Legislature will be procured, at the expense of the vendors, to vest in this company all the privileges secured to the Ramsay Lead Mining and Smelting Company by those Acts.

The consumption of lead in Canada, in the shapes of pig, sheet, and bar, lead pipe, and shot, is very large, and constantly increasing with the growth and progress of the country; and the supply of this home demand would alone afford a steady market for all the metal which a single mine could produce for many years at a much higher price than could be obtained if the product had to be exported, the whole of the lead and lead manufactures now consumed in Canada, with the exception of that raised at Ramsay, being imported from abroad.

As the produce of the mine increases, it may be the interest of the company to manufacture bar and sheet lead and shot, none of which are now made in Canada, the processes connected with which are simple, and the profit afforded by them large, irrespective of the duty of 20 per cent. to which they are subject when imported from abroad.

A contract has been entered into for the purchase of all the rights of the Ramsay Lead Mining and Smelting Company for £25,000, payable in shares or cash, at the option of the directors, and the vendors have undertaken to bear all expenses in connection with the formation and establishment of the company up to allotment, and, consequently, the company will be relieved from any charges under the head of preliminary expenses or promotion money.

Copies of the Articles of Association, as registered, may be inspected on application at the offices of the company.

A first-class prize medal has been awarded by the Commissions of the International Exhibition for the specimens of ore and lead sent from the mines. The specimens were exhibited in the Canadian department of the Exhibition, and may be seen at the offices of the company.

The capital stock of the company is £100,000, divided into 20,000 shares, of £5 sterling each; and it is anticipated that £2 per share only will be needed to place the company in a position to return large and regular dividends. The Ramsay Mine, as an investment, offers advantages over any similar enterprise; it is a property already tested, and made productive, free from the risks and expenses which attend the opening and equipment of an untried mine, while its unquestionable value, so far as science and practical skill can determine, is attested by the highest disinterested authorities.

Applications for shares may be addressed to the brokers, or secretary of the company.

THE EAST CAMBRIAN GOLD MINING COMPANY (LIMITED),

MERIONETHSHIRE, NORTH WALES.

Incorporated under the Companies Act, 1862, with limited liability.
Capital, £50,000, in 50,000 shares of £1 each.
Deposit, 5s. per share on application, and 5s. on allotment.
If no allotment, deposits will be returned in full.

DIRECTORS.

CHAIRMAN—Lieut.-Gen. Sir F. M. SMITH, M.P., K.H., F.R.S., 39, Hyde-park-square, (Chairman of the Naval and Military Assurance Association).
J. HOPGOOD, Esq., 15, George-street, Hanover-square, W., and New House, St. Alban's Herts (Chairman of the Llantwit Vardre Colliery Company).
F. LASCELLES, Esq., Neligherry House, Hampstead (Chairman of East Indian Freehold Land Association).
Lieut.-Col. MONEY, 9, Berkeley-street, Berkeley-square (Director of Canadian Native Oil Company).
MILES CHARLES SETON, Esq., Randolph House, Maida-hill, and Wheal Seton, Cornwall.
CORNELIUS WALFORD, Esq., 8, Cannon-street, and Little Park, Enfield.
Lieut.-Col. WRAGGE, Fairfield House, Old Charlton.

BANKERS—London and County Bank, Lombard-street.
BROKERS—Sir Robert W. Carden and Son, 2, Royal Exchange-buildings.
SOLICITOR—A. Pulbrook, Esq., 61, Basinghall-street.
AUDITOR—James Holah, Esq., public accountant, 7, Lothbury.

The East Cambrian Mine is bounded by the Prince of Wales and Cambrian Mines, several of their lodes running through it. The shares in the former, with £2 15s. paid, sell for £26; and the latter, in three months, have risen 75 per cent.

T. A. Readwin, Esq., F.G.S., before the British Association, stated "The mine has yielded, it is said, at the rate of 8 ozs. of gold to the ton of galena." A deputation of directors, after a personal visit, have expressed entire confidence in its prospects.

Assays of samples from the lodes give from 4 dwts. to 8 ozs. of gold per ton.

The purchase-money for the property is £6000 in cash and £10,000 in shares, not to be handed over until six months after allotment. The vendors are so satisfied with the prospects of the company that they have left the arrangements for payment to the absolute discretion of the directors.

Detailed prospectuses, with reports and forms of application for shares, may be had of the brokers, solicitor, or secretary, S. TAYLOR, Esq., 27, Buckersbury, London.

PROGRESS OF MINING in 1862.—

Dividends paid, £273,049. Loss on mines disappeared, £515,452. New companies advertised, 30; share capital, £389,772. Capitalists should read TREVOIR AND CO.'S "MINES AND MINING," and learn to estimate the rubbish so plentifully provided for their ruin. Per post, 13 stamps.—21, Sun-street, London, E.C. Recommended by the "Cautious Man."

MR. GEORGE HENWOOD, MINING ENGINEER

LOCHHEAD HOUSE, LOCHWINNOCH, SCOTLAND, OFFERS his SERVICES and ADVICE on mines situated in any part of England, Scotland, Wales, Ireland, Isle of Man, &c. Mr. Henwood's extensive experience in his peculiar department of mining science is well known, and will be exerted to the utmost for the benefit of his clients.

MR. D. STICKLAND, M.E., having had upwards of 40 years'

mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE ADVICE on MINES and their MANAGEMENT.

D. STICKLAND beg to OFFER HIS SERVICES in BUYING and SELLING SHARES on advantageous terms for capitalists, who will do well to consult him, either by letter or personally, previous to their investing in mines now at work, or in those schemes now being brought before the public. Good references given if required. Mines inspected and faithfully reported on. Terms, from £2 2s. to £5 5s., agreeable to their magnitude. Travelling expenses beyond 10 miles not included.

Monthly circulars forwarded on application, containing a list of selected progressive and dividend-paying mines, and sound advice to capitalists, which none but practical men can furnish, on receipt of six postage stamps.

5, Finsbury-street, Finsbury-square, London.

JOINT-STOCK COMPANIES PROMOTED.

REPORTS, PROSPECTUSES, NEWSPAPER NOTICES, &c., PREPARED and ADVERTISING METHODISED, by MR. LEE STEVENS, No. 36, CANNON STREET, LONDON, E.C.

FINANCIAL AND ENGINEERING CONTRACTS.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

WELSH GOLD COMPANIES.—Some time since it was stated in the Journal that an improved process for the extraction of gold from quartz had been patented by Mr. Evan Hopkins; but from that time to the present no allusion has been made (so far as I have seen) as to the results secured by his process. This is the more to be regretted, because there can be no question that the success of some of these enterprises mainly depends upon the question of extraction. Is there any truth in the statement that after the introduction of so many inventions, the most eminent of these companies have determined to adopt the most old-fashioned process extant?—A. B. C.

SIR,—Can any of your numerous and intelligent readers favour us, in the columns of your interesting Journal, with extracts now and then from the "Welsh Triads," which I am told speak of the kings of Carmarthen and Merioneth riding in golden chariots, and furnishing the golden reaping-hooks to the Druidical Church generally throughout Northern Europe in the "good old times."—GOGOFAN: *Devonshire, Jan.* 4.

PROSPER UNITED.—The administration of the affairs of this company having been placed in the hands of a *new* finance committee, are the shareholders justified in assuming that the practical executive will within a few months be placed in *new* hands? It would also be satisfactory to know if any member of the late committee supplied the mine with materials to the extent of some thousands of pounds; and, if so, whether the same "member" still forms a portion of the present committee?—LYNX-EYE.

PROSPER UNITED.—I am glad to see, by Mr. Crofts' remarks, that we are to have a new purser, who is quite independent of Cornish influences. I trust all my brother-shareholders will support this step.—A SHAREHOLDER: *Jan.* 7.

PROSPER UNITED.—When this mine was set to work, it was boasted that we should have no merchant-shareholders. Has this been adhered to? I am told not. I hear that Mr. Hosking has resigned the pursership. Let us take this opportunity of appointing a successor whose experience and position will be a guarantee for the most efficient performance of his duties; and, above all, who will be quite out of the reach of all Marazion and other influences.—A SHAREHOLDER WHO HAS LOST HIS MONEY.

WINDING-UP MINING COMPANIES.—Some of your correspondents complain of the long period required in winding-up Great Wheal Alfred accounts. As a shareholder myself, I can sympathise with them. But a more remarkable case is that of East Margaret. Something like a year and a half has elapsed since this mine was sold, all standing, for 2000*l*. But not a farthing of this has been paid to the selling shareholders. I know a shareholder who has written tw ce, at an interval of some months, to request a statement of accounts. But Capt. Treweeke, the purser, has not so much as vouchsafed him an acknowledgment of his letters. It may be, and probably is, true that things had been so managed as that there was a debt upon the former adventurers; but this, surely, could not have amounted to the whole market value of the mine. In any case, however, the application of the money ought to have been submitted to a meeting of the shareholders, and the accounts circulated. The last account rendered was, it would appear, of a date three months anterior to the date of sale.—Y. Z.

WHEAL NORRIS.—Some of the members of the community known as "Busy-bodies" having maliciously stated that a member of the committee has applied to a merchant for a commission upon the goods supplied, it is but an act of justice that his co-committeemen should come forward and disabuse the minds of the shareholders of this slanderous rumour, the more especially if it be without foundation.—SHAREHOLDER.

GREAT CENTRAL OF GERMANY SLATE AND SLAB COMPANY.—May I be permitted to enquire the reason that shareholders are not kept informed of the position and prospects of their property? The undertaking was inaugurated under what was supposed to be favourable auspices, and, therefore, the taciturn demeanour assumed by the executive is the more inexplicable. If the affairs are not progressing so satisfactorily as could be desired, what possible reason can the directors have for withholding the facts from those who have an undoubted right to be possessed of every iota of information, whether it be favourable or otherwise?—A. T.

RAMSAY LEAD MINE.—This mine has frequently been referred to by our Canadian correspondents, and a reference to it will be found in the "Manual for Explorers," by Messrs. Willson and Robb, of Montreal, published at our office, price 1s. 6d.

*** With the Journal of Dec. 20 was published a SUPPLEMENTAL SHEET, in which appears a Plan of the Walker Colliery, in explanation of the Remarks of Mr. Matthias Dunn respecting the late Explosion—the Inquest on the sufferers by the Edmund's Main Colliery Explosion—Progress of Mining on the Pacific Coast—the Mineral Resources of the Territories of the United States—Foreign Mining and Metallurgy—North of England Institute of Engineers—Meeting of Companies: West Caradon, Trevenen and Tremenheere, Great Wheal Vor, Wheal Union, Great South Tolgus, and Amman Coal Company—Mining Photographs, &c.

*** With the Journal of December 13 we gave a SUPPLEMENT, containing Papers on the Processes of Mining on the Pacific Coast—the Geology of Australia—Foreign Mining and Metallurgy—Ancient Geology—Mining Photographs—Meetings of Companies: the Australian, St. Just United, Holmbush, West Par, Caradon Consols, and the Lower Taldrws.—The Copper and Alkali Trades—Gold in New Zealand—Oxygen Gas—Noxious Vapours from Alkali Works—Lining Puddling Furnaces—Safety Fuse—New Lubricating Grease from Coal Tar—Icelandic Fuel—A Steel Merchant Ship, &c., &c.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 10, 1863.

Nearly twelve months ago we drew attention to the unsatisfactory condition of the LONDON COAL MARKET. The coalowners were complaining of a prolonged depression of prices, of a continued overstocking of the market, and of an unhealthy tone in the trade generally. We pointed out to them what we considered to be a remedy for most of the evils of which they complained, and we urged them to abandon the *laissez faire* system—the stolid indifference into which they had fallen,—and bestir themselves to bring the trade once again into a healthy condition. We pointed out to them that the basis upon which the London coal trade was conducted was radically wrong—that it was behind the age, that it benefitted neither the coalowner nor the coal consumer, and that so long as it was upheld they could scarcely hope to rectify those disorders of which they, and they alone, felt the effects.

The system to whose deficiencies we directed attention was that upon which the factorage of coals sent to the Thames is based. Coalfactors are paid for their services on a principle that is unknown in any other department of commerce—a principle which can be justified on no other plea than that of ancient custom, and whose continuance can be accounted for only by most unwonted tolerance on the part of those whose interests it affects. Instead of being remunerated by a commission on the amount which their sales realise, coalfactors are paid by a tonnage rate upon the quantity which they dispose of, and that, too, irrespective of the price which they may obtain. The natural result is that the factor is encouraged—not to secure the best price that he can get for the article entrusted to him, but to force sales in the market, and, consequently, to lose sight, so to speak, of the interests of the producer in the transaction.

We advised the coalowners to rise up in their strength as a great and influential body of men, and put an end to this antiquated system. At the same time, they were recommended to agitate for a reduction of railway charges and City dues, and other expenses which abstract so much from their pockets. No one ventured to dispute the justice of our remarks, no one questioned the soundness of the advice given. The coalowners, indeed, admit the evil effects of the system, and we do not see how they can well do otherwise, seeing that it affects that important adjunct to the welfare of mankind—the breeches-pocket. One of their number, a resident in the county of Durham, has written strongly upon the subject, giving figures to show the relative expense to the coalowners of the factorage system, and payment at a reasonable rate of commission. Even the committee of the Coal Trade Association, slow and impassive as the gentlemen composing it generally are—at least in a collective capacity—could not refrain from making some allusions to the matter. In their annual report, issued last February, they say—"Looking particularly at the return of coals sent to the London market, the committee scarcely need to enforce the necessity which the trade must feel, under the circumstances, of cheapening both cost of transit and delivery of coals shipped to the metropolis. * * The state of the London market adds force to their arguments for taking every practicable step to free coals sent thither from any expenses for sale and delivery." But what "practicable step" has been taken to accomplish this result? Not one. The factorage system exists in full vigour; the City dues are unchanged; the railway charges remain just as they were.

The member of the coal trade to whose writings on this subject we have just alluded has published another appeal to his brethren to bestir themselves in the matter. He says:—

I should like to know whether the result of the twelve months' operations in the London market by any of the great coalowners of this country is so eminently satisfactory that they have no reason at all to complain of it? I believe, on the contrary, that there are but too many of them who must confess that 1862 has in this repect been a worse year for them than even its predecessor. Yet consumption in the capital must have been on an abnormal scale of increase during the summer, owing to the influx of visitors to the Exhibition; while the amount of the supply was actually less than in 1861. Yet in spite of hese advantages prices were not supported. At this very moment, owing to the temp at that has recently prevailed, there is a scarcity and consequent advance in the rate of freight to the London market. Concurrently there is a fall in the price of coal here. Thus does the coalowners' candle burn vigorously at both ends! Nor is this a solitary or exceptional instance. The same illogical "effect defective" is of very common occurrence, inasmuch that from this and other perverse causes London gets supplied with the best household coals throughout the year at an average cost price, or so little above it as to be inappreciable. I really can conceive of no valid reason why the best household coal, the produce of collieries that may be counted on the ten fingers, should not be able to maintain itself by its own merits at a remunerating price on the London Coal Exchange throughout the year. Its quality is so far exceptional that it is to some extent isolated from rivalry, and so necessary to a vast class of consumers, that at a fair price (and nothing more is wanted) they must and will have it; in fact, it is not they, but the London coal merchants who reap the chief benefit of the systematic and needless depression of its value. Even the advertising gentry are pocketing 8s. per ton, or thereabouts, gross profit on the best coal, supposing them to supply it genuine, about which "the wise may make some drachm of a scruple, or perhaps a scruple itself." In short, the only person connected therewith who derives no advantage from the London coal market is he who incurs all the risk and expense of supplying it with best coal—the northern coalowner.

The writer repeats his strictures upon the "mischievous and ruinous anomaly" of the present factorage system, and declares that until there be a change in this matter there will be no hope for an improvement of any permanence or vitality in the London coal market. We echo the sentiment, and as the time is approaching when the Coal Trade Association will meet to agree upon its annual report, we urge them, if they are in earnest about this matter, to indulge in something more forcible than the vague recommendation with which they dismissed the subject last year. The control of the London market is pretty much in their own hands, if they only knew it, and with united energy and perseverance they might remove almost every difficulty under which they now labour. It is of no use to complain; if they do not put their shoulder to the wheel the wagon must stick in the mud—and we may say further, it ought to stick there. It is all very well to talk about lessening consignments, and keeping up prices. Combinations to keep up prices in these days of free trade are impracticable; the temptations to break through them are too great, the opportunities too numerous, but a combination to reform abuses is both feasible and praiseworthy, and in the hands of so powerful a body as the coalowners, could hardly fail to be successful.

Marvellous as, at times, have been the result of mining enterprise, we do not believe there has been a more rapid development of great riches than at the Yudanamutana Mines of South Australia. From our own resources we know nothing, on this occasion, of the progress making, but the local press are continuously drawing attention to the extraordinary wealth which this property presents. The unfortunate wreck of the *Columbo*, with the Australian mails, has left us without our usual letters from correspondents; but some journals have come to hand, and extracts therefrom will be found in another column. The *South Australian Advertiser*, of Oct. 25, makes special mention of the Blinman Mine, which is one of those comprised in the Yudanamutana grants, and has been considered as the second in order of importance, yet, notwithstanding it is now shown that, although the workings have not extended over a period of more than four months, that the hands employed are not more than 50 (men and boys), and that the lowest point is only 10 fathoms under surface (this depth, moreover, being at one point only, the average depth being 5 fathoms), it is declared that the ore at grass, in transit to the coast and shipped for this country, gives an aggregate of upwards of 800 tons. Much of this is represented as of the richest possible quality—60 to 70 per cent.; but taking as an average as little as 35 per cent., we have here a declared value of about 30,000*l*. as the yield of four months, or equivalent to 8000*l*. per month, with an outlay for labour of the wages and charges of 50 hands. This, indeed, is a low average to take, when "masses of solid ore of 2 and 3 tons weight, averaging throughout above 60 per cent." are spoken of as being "laid bare," and the ore described as "like rough copper, which has been twice through the smelting-furnace."

We have already said that this has been considered, and probably still is, No. 2 of the mines, the Yudanamutana proper being regarded as of far greater value than the Blinman and others, from the remarkable quantity of ore exposed to view, and described as almost solid; but, supposing that it merely takes equal rank with the Blinman, the produce of the two will present a return of wealth quite unparalleled, and render the paid-up capital quite unnecessary—indeed, an incubus to the project. It will give an excellent opportunity of returning a portion of the money subscribed to the shareholders—at least 1*l*. per share—and thus render the profits divisable on 2*l*. instead of 3*l*.; or, in other words, declaring a bonus of 33 per cent. Such a step would be unprecedented, we believe, but nothing would tend more to show the *bona fides* of the undertaking, and give confidence to mining enterprise in South Australia; while, in fact, it would only be what the shareholders are entitled to in equity, under the peculiar circumstances of the case. The journal which has reached us is quite silent on the subject of the Yudanamutana proper; but, judging from the prospects of that mine, as shown in our last advices, we do not apprehend that it will be found in any way inferior to the Blinman. By the coming mail it is expected that Capt. ANTHONY, who was sent out from Cornwall to take the general control of the Yudanamutana Mines, will forward his report; and those who have the best opportunity of judging of these matters assure us it must confirm the statements of our colonial contemporary as to Blinman, and the previous remarks in respect of Yudanamutana proper. It will be a document of the utmost importance, and we trust that the directors will give publicity to it *in extenso*.

We will not leave the subject without mentioning another fact of great importance. The question of transit of the ore to the coast has frequently acted as a nightmare to alarmists, and it has been argued that the cost of conveyance would be a very serious item of expenditure. We are assured that even as respects the existing means of sending forward to the coast from the mine that it is not so, that the number of drays to be engaged is large, and the cost not excessive; but to obviate any difficulty of carting increased quantities of ore the directors have purchased three traction-engines, with six wagons to each, which will be shipped from this country within a month. Each train will convey 50 tons, and as the time occupied will not exceed two days each way, the three engines will be capable of doing an enormous amount of work. The cost will not exceed 25s. per ton from the mine to the port, and as these carriages will likewise be engaged in taking up stores for the farmers and others, for which a proper charge will be made, the positive expense of bringing the ore down for shipment will necessarily be reduced to a very small figure indeed per ton.

The Burra Burra Mine has experienced no inconvenience from its distance from the coast, although the intermediate country is rough and hilly, and Port Adelaide 108 miles from the mine; whereas Blinman is about the same, or rather less, in distance from Port Augusta, their port of shipment, and the country perfectly level—indeed, the Western Plains constitute the intermediate space, so that it is quite clear there is nothing to apprehend as to cartage, even by the ordinary means, while the traction trains, from the nature of the country, will be propelled with facility and quickness, and thereby readily convey any increased quantity of ore.

MINES, MINERALS, AND MINERS—No. I.

[FROM A CORRESPONDENT.]

From the turn which the discussion in your Journal has taken on the subject of "Mines, Minerals, and Miners," it appears desirable to say a few words on the terms which are so commonly employed, and so frequently misapplied—Practice, Theory, and Science—in reference to mineral deposits. It does not appear necessary to involve the question with any remarks on Mining operations, since the mechanical processes of sinking, driving, winding, dressing, &c., are in no way concerned in the question. Experience—*practice*—has taught our miners—and it is the only way in which a man can be taught—how best to employ his muscular power, and the appliances with which he is furnished, in rending the rocks. Certainly to the Agent directing the subterranean works, as to the Engineer who constructs an embankment or drives a tunnel, a knowledge of mechanics is ever valuable; and it is no less certain that a knowledge of some of the laws—*rules*—which regulate the motion of air, must aid the Agent in securing the necessary ventilation. On these and a few other points I may trouble you on some future occasion.

The questions at issue are—Can a Miner by mere experience *(practice)* arrive at such a knowledge of mineral lodes as will serve to direct him with comparative certainty in his explorations? and, what are the advantages to be gained by calling in the aids of Science?

Practice is the continued operation of a man's mind—and of a man's muscles too—on certain labours, which are, in the present case, the search for mineral treasures. Practice informs the Miner that, under a certain set of conditions, he has usually been fortunate in finding metalliferous ores; and, consequently, if he sees those conditions repeated, he argues that he will again find that he seeks for. This is sometimes the case; but it not unfrequently happens, that similar conditions in "the country" do not produce similar conditions in "the lode." Mere observation—practice—does not instruct a man in the method to be observed in eliminating the truth from these exceptional cases.

The knowledge acquired by practice, observation, and experience in any branch of enquiry is always empirical, and to a certain extent uncertain. We use, unfortunately, terms so loosely in the English language, that almost at every step it becomes necessary to explain the meaning desired to be given to the terms employed. Empirical science is not quackery—which is mere pretension—but that kind of knowledge which is dependent upon experience only. Such, for example, is the *practice* of medicine—Calomel is given to a patient, and a certain effect is produced; consequently, if the medical man desires to produce the same effect in another patient, he repeats the practice of giving calomel. Now, this mode of proceeding is purely *empirical*. No one has, as yet, been enabled to explain the manner in which this mercurial compound acts on the vital organisms. If anyone succeeded in discovering this, his *theory*—that is, his statement of the facts, would advance our knowledge to the condition of *true science*. The present state of speculating on the probable causes leading to the observed effects are *hypotheses*, or guesses, and thus distinguished from *theories*, which are developments of known truths.

Newton's development of the law of gravitation is a *theory* established on a sure foundation. Newton's explanations of the laws of light are *hypotheses*, waiting further discoveries to advance them to the condition of *theories*.

The knowledge gained by experience is of great value, but the evidence of the results of many hundreds of years prove that man makes no advance by experience only. The history of the Sciences of Gravitation, of Heat, of Light, of Electricity, all show that while men were merely allowing themselves to be guided by *experience—by practice*, they moved only in circles; they made no advance. But the moment they began to observe, and carefully to record—to examine and re-examine—so as to test their observations, and eliminate the errors of observation, and then brought powers of Reason to bear on these, they advanced by the aid of *induction*, and made those clear *deductions* which led to the discovery by Adams, a Cornishman, of the planet Neptune; which led Watt to the improvements shown in the steam-engine; which has given us many useful applications connected with Light; and benefited man by the introduction of the Electric telegraph.

Practice—observation—experience, is the road along which we advance to knowledge, and it is the only road along which we can ever hope to arrive at clear views on the causes regulating the condition of mineral lodes. But experience alone, in man must be limited, and by it, as I have said, he can only move in a circle; he cannot advance beyond it. But if every man, placed in the proper conditions for observing facts, trained his mind to observe correctly, kept his reason free from the shackles of preconceived ideas, and simply noted the facts he had observed, communicating those to other men, and receiving their observations in return, it would soon be found that, the reasoning powers being brought to bear on the observations, instead of *hypotheses*—guesses—we should have *theories*—facts—and advance our knowledge to the condition of true science.

APPLICATION OF GUN COTTON TO BLASTING IN MINES.—Although in England comparatively little has recently been done in connection with the manufacture of gun cotton, the inventors of Austria have been unceasing in their efforts to perfect the discovery, and there now really appears to be great hopes of success. It is truly remarked that nothing can well be more fallacious than the ordinary or popular opinion which obtains in regard to the class of violently explosive chemical bodies, of which the fulminates are typical. Assuming that the balistic employment of these bodies were, on the score of safety, unobjectionable; assuming them not prone to explode on the slightest provocation; still, violent though they are in explosion, their violence is of such an immediate and limited character that they could never take the place of gunpowder. The value of gunpowder depends on the combination, in just degree, of two qualities—first, upon the liberation of a competent volume of gas; second, the liberation of the same in a suitable time. Whatever the ultimate volume of gas may be, if liberated all at once—or, more properly speaking, in a space of time infinitesimally short—the case is one not capable of application to

projectile uses. The real fulminating gold and silver, as well as the fulminates of these and other metals, are thus circumstanced. Of one and all the act of detonation is extremely rapid. The immediate shattering effect of such detonation is enormous, but the projectile force is inconsiderable, and hence it is urged that in proportion as an explosive compound approaches the constitution ot the fulminates, so would its value as a material for blasting purposes be enhanced. Gun cotton may be regarded as occupying a middle place between the violently explosive fulminates and gunpowder, whilst there is certainly no more danger in using it than in using gunpowder; its combustive duration, under all circumstances, is greater than that of the fulminates, and, what is of still greater importance, that extent of combustive duration may be increased or diminished at pleasure, within certain limits, by the mere expedient of varying the tightness of compression to which the gun cotton is subjected. Long after the hope of using gun cotton for the purposes of warfare had been abandoned in this country, it was considered that for blasting purposes it promised considerable advantages, and Mr. Hall, the powder manufacturer, made arrangements for preparing it on a large scale. A serious accident, however, occurring from the explosion of gun cotton on Mr. Hall's premises; he thenceforth abandoned the manufacture, which in England has never been resumed. Whether the improvement introduced by Baron Lenk, and described in his treatise—"Das gezogene Schiesswoll-feld und Gebirgsgeschütz (nach Lenk's System) in seiner Eintheilung, Einrichtung, Ausrüstung, Bedienung, und Verwendung"—will admit of the general use of gun cotton for blasting purposes remains to be seen, but it is certain that two of the greatest obstacles to its application have been removed. By treating the gun cotton with "soluble glass," Baron Lenk has prevented it from absorbing moisture, as it was very liable to do, as formerly manufactured; and he has succeeded in assimilating the various systems of graining (in gunpowder) by spinning the cotton into cords of various sizes.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 8.—The Coal Trade here at the commencement of another year is certainly flat in many of its branches, still the coalowners and workmen do not appear to be despondent. The speedy adjustment of the differences between those parties at the steam coal collieries of Northumberland sufficiently proves this. A slight reduction has been made in the rates paid at most of these collieries; there are some exceptions, however, the old prices having been retained at some works, this being the case at North Seaton and one or two other places. It would appear, however, that the coalowners of this district will be compelled shortly to seek out new channels for the disposal of their coal, or by the establishment of more rapid or cheaper means of transit secure increased sale. The constant increase in the coal supplied to the metropolis by rail from the midland and southern counties would seem to compel some exertions of this kind. Another mode of retaining the house coal trade of the metropolis, and perhaps of regaining some of it already lost, also presents itself in the contemplated drainage of the Tyne collieries, as by this means a considerable quantity of first-class house coal would be available from the High Main seam, and this coal would almost defy all competition. The carrying out of this important measure can hardly be delayed much longer, especially when it is considered that but few collieries remain where a supply of best house coal can be produced, and the number of those is continually and rapidly diminishing.

The new "winning" in the Plashett's coal field has made considerable progress lately, the output having reached 100 tons per day. The operations have, however, been slightly retarded by a feeder of water met with. This feeder is at present 500 gallons per minute, but as the works are drained by means of a level, this will not ultimately cause any injury to the works, neither will it cause much expense. The strata here, principally composed of limestone and red sandstone, abound in open fissures, which convey the water immense distances from the surface, so that considerable feeders of water may be expected to be met with in opening out the coal mines.

The cause of the explosion of gas at Monkwearmouth Colliery has been found to be an escape of gas from the lower seam, now inundated by the water from the metal tubbing. The gas having accumulated and forced its passage upwards, and, as before stated, come in contact with the furnace, causing an explosion, fortunately very slight. This has caused another arrangement to be made, the furnace being in course of removal to a more safe situation, and the shaft where the outburst of water took place having now been repaired to the depth of 180 fathoms, this shaft will again be used, as formerly, as an upcast.

The TUNNELLING MACHINE, lately worked in the Claxton's Quarry, Gateshead, is now considered to be very efficient, several improvements having been introduced in the mode of inserting the cutting chisels used, and also in the form and mode of making those chisels. It is now being removed, and we understand it is to be sent to Italy at once, to be used in the construction of the tunnel through Mount Cenis; and the makers of the machine, Messrs. Hawks and Crawshay, of Gateshead, are preparing plans for the construction of another machine, into which all the improvements suggested by the long trial in the Claxton's Quarry will be introduced.

The "legal correspondent" of the *Newcastle Daily Chronicle*, under the head "Mines and Minerals," says—"The Newcastle and Gateshead Law Society, in the annual report of the committee, lately presented, refer to the Act passed in the last session "to confirm and sanction dealing under powers of sale by trustees.". They say: "The bill originated at Bristol, and had reference to the reservation of mines and minerals, on the sale by trustees of the surface, and was rendered necessary by the decision of the Master of the Rolls in a recent case of Buckley *v.* Howell, wherein he held that under the ordinary power of sale or exchange trustees could not sell the surface, reserving the coals or other minerals, or, *vice versa*, sell the minerals without the surface. As this decision affected innumerable titles in the West of England as well as in the North, your committee co-operated with the Bristol Law Society in the first instance, and afterwards with the Incorporated Law Society, in obtaining a parliamentary confirmation of the titles which were considered insecure by the exercise of the power of trustees in this behalf. A petition was prepared and sent for presentation to the House of Lords, and the bill was passed without opposition."

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 8.—The Quarterly Meetings of Ironmasters, and others connected with the trade, have been held this week, at Wolverhampton on Wednesday, and to-day at Birmingham. At each meeting the attendance has been tolerably large, and the tone of the meetings favourable. The orders in hand at the commencement of the year are usually of small amount, as stock-taking and balancing accounts interrupt the course of business, and at the present moment some of the makers of finished iron are rather short of orders. There was, however, a general impression that after the meetings, and as the spring approaches, there will be a good demand. The effect of the uncertainty which the state of war in America occasions is to restrict operations to current wants, and to check speculation; and, as this state of things has prevailed for some time, stocks of iron are low, and many purchases of iron have been delayed from time to time. It is, therefore, highly probable that there will be a good demand during this year, especially if the shipbuilding trade remains as good as it has been for some time past. America is taking considerable quantities of iron, and must do so as long as the war lasts. France is steadily increasing her consumption, and, though it is probable that the demand for Lancashire will be flat this year, the present low prices will be pretty sure to lead to considerable purchases for railways at home and abroad. The best proof of the soundness of the Iron Trade is to be found in the fact that the actual business done at the meetings, which is mainly in the sale of pig-iron, has been in most cases at an advance of 1s. 3d., or in some cases 2s. 6d., per ton on the advanced rates realised in Oct. last. Pig makers are very firm at the advance, and it has been given by many of the large purchasers of pig-iron. Cinder pigs have been steadily rising in price, owing to the increased demand, which arises from the augmented employment of hematite iron, with which this inferior make forms a good mixture. Sales have been effected at the meetings of this kind of pig-iron at 2*l.* 17s. 6d., which is an advance of fully 7s. 6d. on the price paid at the commencement of 1862, and which gradually rose during the year. Owing to the higher price of Staffordshire pigs, more Cleveland iron is now coming into South Staffordshire. The carriage paid is about 11s. 8d. per ton—a considerable rate, but which the difference of price in the two districts enables purchasers to pay. Accounts from that district describe the makers of finished iron there as being very busy, especially in the shipbuilding trade. One important element in the present aspect of the Iron Trade is the increased and increasing consumption of thick plates for war vessels and for fortifications. In connection with this subject, it may be mentioned that Mr. J. B. Johnson, roll turner of Wolverhampton, is making two pairs of rolls for Messrs. John Brown and Co., of Sheffield, for rolling armour-plates 6¼ in. thick. Each roll is 2 ft. 8½ in. in diameter when finished, with a clear length of 8 ft., besides the nicks and ends; and each weighs 11¼ tons. These are, in all probability, the largest rolls ever turned in the world, and would astonish some of the old ironmasters; indeed, they do astonish the makers of the present day.

The Coal Trade is very active; for some time the price of coal has been low, and there has been an indisposition to open new mines, and as the small workings are undertaken by persons of little capital, and who work mines over again to get the remnants, the supply is scarcely equal to the demand. Should the present requirements continue, probably new pits will be opened, and some are being sunk at the present time, or mines now in operation carried down to lower measures.

The shocking accident at Prior's Lee, Shropshire, by which eleven men and boys were killed, as noted last week, excited the sympathy of the inhabitants of Wellington, who held a meeting on the evening of the 2d inst., for the purpose of providing funds for the support of the widows and orphans of the men killed. A number of influential gentlemen were present, but as one of them was appealing to those present on behalf of the sufferers a letter was handed to the chairman from Mr. T. E. Horton, one of the partners of the Lilleshall Company, for whom the deceased worked, stating that they intended to provide for the families until they were able to do for themselves. This rendered further proceedings unnecessary, except that a resolution expressing the gratification of the meeting at the liberality of the company was passed. The conduct of the Lilleshall Company needs no comment—it speaks its own praise; but it does suggest that steps should be taken to establish societies specially for miners, which would afford relief, not only in cases of accident, but also in illness and old age. Whether the attempts to establish such an institution for the whole kingdom is likely to succeed it is difficult to say, but either general or local societies of this nature are great social necessities.

The NORTH STAFFORDSHIRE COAL AND IRONMASTERS' ASSOCIATION held its quarterly meeting at Stoke, on Thursday last. Mr. Wragge was re-appointed Chairman for the current year, and a vote of thanks was given to him for his services during the past year. The *Staffordshire Advertiser* says that the meeting adopted the resolution of the South Staffordshire Ironmasters to make no alteration in the prices of finished iron for the ensuing quarter, and an opinion was expressed that any attempt to obtain an advance upon the list prices (which were fixed in July, 1861, and have been in operation since that time) would be attended with failure at the present time. In pig-iron but few transactions were reported. The price of the best North Staffordshire forge may be quoted at 57s. 6d. at the works, while other qualities may be brought for less money. The attempt to obtain better prices for ironstone was stated not to have been successful. The coalmasters who depend upon house-fire consumption have suffered from an unusually slack demand for the time of year, in consequence of the mildness of the weather. It was stated at the meeting that some of the employers have received applications from their workpeople for an advance of wages, and that one or two in the district has conceded a conditional increase per ton. The question was very fully discussed, and it was resolved that any advance of wages was not justified at the present time, and that the meeting regretted that a few firms in the district had admitted any alteration in the scale of wages without a conference of the trade upon the subject. The proposal to rate ironstone mines was mentioned, and led to discussion. The feeling of the meeting was that the existing mode of rating coal mines is so unfair, that any extension of the same system would be in the highest degree inequitable and open to objection. The meeting was well attended, and most of the principal firms in North Staffordshire were represented at it.

REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 8.—The traffic on the railways of the kingdom is generally a good key as to the prosperity of the several districts through which they pass. From various circumstances, which are well known to the commercial public, the year 1862 has been one of considerable depression in every branch of trade, and a diminution in railway traffic might be naturally looked for. This has been the case in many instances; but where the passenger traffic forms a material item, such as on the Great Western, West Midland, London and North-Western, &c., an increase has taken place, mainly in consequence of the large number that visited the Exhibition. This, however, hardly affects the shorter railways, where the passenger traffic only averages from one-fifth to one-tenth of the mineral and other traffic. It is gratifying, therefore, to find that every railway in this district, despite the general depression which has prevailed, shows a substantial increase in receipts as compared with the corresponding period of 1861, which is another proof of the vast resources of the district. The following are the total receipts for the last six months of the two years respectively:—

	1861.	1862.
Llanelly and Llandilo	14,280	15,880
Monmouthshire Railway and Canal	61,319	62,639
Rhymney	18,964	22,932
Taff Vale	125,637	137,597
Vale of Neath	47,138	50,994

These figures speak for themselves, and need no comment. One fact which may be deduced from the returns deserves notice. As a gradual and sound increase has taken place in the receipts during a time of so much depression, it may be safely inferred that, were the coal and iron trade in that active state which was the case a few years since, the Welsh lines would unquestionably be the best paying in the kingdom. As matters are at present their dividends average from 4 to 9 per cent.

An application for a winding-up order was made against the Llanharry Hematite Iron Ore Company (Limited), before the Master of the Rolls, on Dec. 20. The directors of the defunct company were Sir Patrick Cusack Roney, 15, Langham-place; J. S. Adams, Philpot-lane; T. Osborne Stock, Lloyd's; Francis Tothill, West of England and South Wales District Bank, Clifton; and C. H. Waring, the Darren, Neath. Mr. Selwyn, Q.C., appeared in support of the application, and said this was a petition of Mr. Habakkuk, a contractor, and a judgment creditor of the company for a heavy amount. Execution had been issued under the judgment, to which a return of *nulla bona* had been obtained. The petition asked for the usual order of winding up. The Master of the Rolls asked if the proper parties had been served and the necessary advertisements issued. Mr. Selwyn replied that these matters had been complied with. They had not said anything about an official manager; but if his Honour thought proper to appoint Mr. Harding the petitioner would not object. The Master of the Rolls said no notice had been given of this. The usual winding-up order was then made. It is expected that the case will come before the Court again some time this month, when the directors will have to attend in order to be examined by Mr. Selwyn on behalf the petitioning creditor. Mr. Habakkuk was the contractor of the company, and his claim arises from wages, labour, and plant in working the mine. The amount of the debt is upwards of 1600*l.*, exclusive of the costs. It is stated that some curious revelations will be made as to the mode in which many public companies are got up.

A case of some interest to the mining public came before the Glamorganshire Court of Sessions this week. The Mwyndy Iron Ore Company appealed against the poor-rate valuation made upon them, on the ground that the premises were iron mines, and as such not legally rateable. They also held that if they were liable to be rated the valuation (1800*l.*) was excessive. Mr. T. Allen appeared in support of the applicants' case, and Mr. Bowen and Mr. Hughes represented the respondents, the overseers of the parish of Llantrissant. The counsel for the respondents contended that, as a large quantity of ore was raised from patches, it was liable to be rated. Several witnesses were examined, and the Court decided that the company were liable to be rated in respect of ore raised from the patches. The rateable value was reduced to 1500*l.*, each party paying their own costs.

The general meeting of the Swansea Canal Company was held on the 2d inst., and it was resolved that the proposed railway to Bryn Amman and Gwaencaegurwen should be forthwith constructed. The railway will pass through an important undeveloped mineral district, and there is no doubt but that the company will receive handsome returns for their capital.

At the South Wales Institute of Engineers general meeting, to be held at Merthyr Tydvil, on Jan. 14, the following papers (read at former meetings) will be discussed:—Mr. Cox's, "On the selection and treatment of coal for the blast-furnace and cupola;" Mr. Parry's, "On puddled steel;" Mr. T. James', "On mining in the county of Leitrim;" Mr. Waring's, "On coal-cutting machinery;" and the following papers read and discussed:—"On the selection and value of coke," by Mr. Child; "On long work," by Mr. Hedley; "On boiler explosions," by Mr. M. Jones.

SOUTH WALES SHIPPING PORTS.—The returns which have come to hand of the exports and imports of the various ports in South Wales, show that a satisfactory amount of business has been done during the past month; and, notwithstanding the adverse circumstances against which both the staple trades of the district have had to struggle (the American trade being completely destroyed), we are glad to find that the exports both of coal and iron exceed those of the previous years of 1861 or 1860. As compared with the exports for the year 1859, there is a large increase on coals, but a decrease on iron, that year being acknowledged as one of the most prosperous for the iron makers.

CARDIFF.—When we consider that this port has no less than 37 or 38 coal shipping drops, and uninterrupted narrow gauge communication with Aberdare and the heart of the steam coal basin, it is no wonder that it still maintains its lead as the chief exporting port in the whole Channel. During the past month of December a very large quantity of coal was sent off, whilst for the whole year of 1862 the export has been unprecedented. The following are the returns for the past four years:—

1859	Tons coal 988,187	Tons iron	182,817
1860	1,142,522		169,467
1861	1,127,232		132,493
1862	1,322,531		172,552

Notwithstanding this great increase, we fully anticipate that the present year of 1863 will prove more prosperous, for our columns have already announced the fact that the whole of the contracts for the supply of the West India Mail Company's boats have been transferred from Newport to Cardiff, and which contract alone will certainly not be under 100,000 tons. Whilst the traders, therefore, have ample cause to feel satisfied with their present prosperity and still better prospects, we think that they should make a determined and united effort to foster and encourage an import trade, for without which the port generally, and the town most especially, will never enjoy that high commercial status and prosperity which are shared in by those ports which have both an export and import trade.

NEWPORT.—This port has done a good stroke of business during the past month, more especially in the coasting trade; but it is believed that the official returns (which have not yet come to hand) will show a decrease upon the trade of the year which has just closed. The removal of the West Indian Mail contract from the port of Cardiff is a striking proof of the correctness of the remark we have often made—that the trade of Newport is surely decaying, and should induce the authorities to exert themselves to render available those facilities for doing a large trade which they have at their command.

SWANSEA.—This port has made considerable progress during the past year, and the official returns just issued under the authority of the Harbour Trustees prove that Swansea is a growing port. During the year several large coal drops have been erected in the south docks by the Vale of Neath Railway Company, whilst others are being energetically pushed forward, which, together with the opening of the direct line from Neath to Swansea, will doubtless give a still further impetus to the trade of the port. The great requirement of Swansea is narrow guage communication with the steam coal basin of the Aberdare district, and this, we are glad to say, will be afforded by the opening of the line of railway just mentioned. That a large increase of trade is naturally expected to arise therefrom is evident from the number of new coal drops which have recently been erected by the railway company, and the strenuous exertions of the Harbour Trustees and the local authorities to obtain increased depth of water, so as to allow of vessels of larger burthen coming to the port. From the returns of the past month we find that 425 vessels entered the port with an aggregate registered tonnage of 58,215 tons, and the shipping rates received for the month were 1482*l.* 5s. 7d. For the corresponding month of 1861 the number of vessels which entered the port were 390, with an aggregate registered tonnage of 45,438 tons, and the shipping rates received were 1102*l.* 4s. 7d. During the year 1862, 5767 ships, with a registered tonnage of 655,847, entered the port, the total shipping rates received being 15,839*l.* 19s. 8½d., whilst for the year 1861 the number of vessels were 5700, with a registered tonnage of 620,151, and the total shipping rates received were 14,482*l.* 3s. 3d., the increase in favour of 1862 being 67 ships, 35,696 tons, and 1357*l.* 16s. 5½d. The great increase has been in the European trade, or in vessels over 100 and under 300 tons register. The exports are not given, but the lowest estimate which has been made puts down the total quantity of coal at between 600,000 and 700,000 tons, but the exports of iron have been small.

NEATH HARBOUR.—Abstract of the trade of the Port of Neath (including the Briton Ferry Docks) for the month ending Dec. 31:—

European trade, 15 vessels, 1369 ton register, 2144 tons burthen; coasting trade, 123 vessels, 9629 tons register, 14,776 tons burthen; beyond Europe, 1 vessel, 133 tons register, 219 tons burthen: total, 139 vessels, 11,131 tons register, 17,139 tons burthen.

IMPORTS.—Copper ore, 3543 tons; pig-iron, 820 tons; iron ore, 1467 tons; grain and flour, 1168 tons; pit and cord wood, 291 tons; timber, 79 tons; miscellaneous, 358 tons: total, 7726 tons.

EXPORTS.—Coal, coke, and culm, 14,478 tons; copper, 181 ton: bar iron, 495; tinplates, 326; timber, 18 tons; miscellaneous, 367 tons: total, 15,865 tons.

DIED,—On January 2, at Abercarn, Mr. EBENEZER ROGERS, aged 46. Mr. Rogers was a member of the Council of the South Wales Institute of Engineers, a Fellow of the Geological Society of London, and a member of several other scientific societies. He took much interest in the development of mining, and lost no opportunity of urging upon the practical man the importance of sound scientific knowledge, or of aiding him in attaining it. He was a highly-esteemed correspondent of the *Mining Journal*, his contributions being at all times of a thoroughly practical and useful character. Some years since Mr. Rogers discovered the "Red Mine," on the Brendon Hills, Somersetshire, and the Ebbw Vale Company became the lessees of the property. By this discovery he obtained a handsome yearly income, and during the last few years lived in comparative seclusion. The scientific attainments of the deceased were known not only in the district, but throughout the kingdom; and his loss cannot fail to be regretted by the members of the associations with which he was connected and a large circle of private friends.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

JAN. 8.—The Iron Trade during the past week has been in an improved state, and the reports from the district are generally of a more encouraging nature. There is an unusually heavy demand for rails and armour plates; indeed, the enquiry generally for railway iron is exceedingly brisk, and likely to be much more active, if only a section of the bills which are now before Parliament should receive official sanction. The Midland and Great Northern have just given out a large order for renewals, which has been taken by two Yorkshire houses. The Coal Trade is very active, and the demand for the London and southern markets has visibly improved. There is a rumour about an advance in rates, but up to the present time we have not had any actual intimation of the circumstance. The men at all the works are fully employed, and there is every prospect of a good spring trade. A very sad accident took place at the Clay Cross Works, on Monday. Mr. John Parker, the principal viewer, was being brought up one of the pit shafts in a cage, when from a fear of being over-wound he jumped out of the cage, and was so severely injured that he died the same day. An inquest was held upon the body, when Mr. Hedley, the Government Inspector, was present, and a verdict of "Accidental Death" was returned. Mr. Parker was most highly respected, and warmly received whenever he went upon the works, and his untimely death will be a great loss to all the overmen at the works.

Efforts are being made to repair the damage done by the recent explosion at Masborough, but a considerable time must elapse before the works can be again in full work. The concern being worked for the benefit of creditors, the loss will fall on them. A public subscription has been opened for the relief of the suffers, but the demands of the Lancashire distress have been so urgent that it only makes slow progress.

Already arrangements are being made with the Midland Railway Company for the conveyance of minerals on the new line to Hassop, to which place the line has been opened for public traffic.

Messrs. Harris, of Westgate, Rotherham, have just completed a monster casting, weighing about 36 tons, and intended for the bed of a steam-hammer at the Rutland Works. Its progress from the foundry to its present position was attended by several curious little casualties. When Tinsley Bridge was reached the wheels of the dray upon which it rested sunk through the wooden flooring, and some days elapsed before it could be again hoisted. At Attercliffe Common, and again in Corporation-street, Sheffield, other delays were caused by the sinking of the dray-wheels, but these obstacles were comparatively soon removed by the united power of 40 or 50 horses, and a large number of men, who formed part of the crowd that, of course, assembled as soon as the stoppage occurred.

The subscriptions for the Edmund's Main Colliery fund have now reached upwards of 1300*l.*, Her Majesty having contributed 100*l.*, and the workmen in the employ of the Sheffield Coal Company 21*l.* 2s. 1d., and a question has now risen whether the guardians of the poor are bound to relieve those receiving aid from the fund. If guardians act thus, few will subscribe in future instances. In reference to the operations at the mine, there is very little that is new to report. The water is flowing steadily into the mine from the trench connected with the adjacent stream, and as the supply has hitherto been found inadequate to fill the workings speedily, the trench is now being enlarged, and when that is completed, all the water that can be diverted into the channel will be thrown into the mine. The extent of the working is, however, so large, that even with the vast volume of water that will be thrown in during next week, it is not expected that the water will be "roofed" for 12 or 14 days yet. When the bodies are recovered, it is expected that at the resumed enquiry there will be a complete and searching investigation into the manner of working the mine. At the first inquest, the coroner explained that he should confine that enquiry as much as possible to the immediate causes of the death of the two men, Pickering and Davy, about which there could be little doubt. He added, in summing up, that he had allowed irrelevant questions (the said questions being mostly put by the Inspector, and having reference to the state of the workings and the manner in which the mine had been worked) to be put, "in order that the survivors might see that there was some consideration for them, and that, if possible, something might be adduced that would lead the scientific gentlemen to some speedy means of getting out the bodies."

FOREIGN MINING AND METALLURGY.

From Belgium we learn that the last week of the year was a favourable one for the rail-producing industry of that country, several important contracts having been concluded both at home and abroad. Thus, the house of De Dorlodot Brothers has secured two valuable orders; one for the delivery of 7000 tons of rails required for lines from Hal to Ath, and from Tournay to Lille, and the other for the delivery at Antwerp of 1000 tons for an Italian line. Two other contracts have been concluded by the Seraing Company in participation with Messrs. De Dorlodot for the fabrication of about 500 tons of rails roquired for the lines from Liége to Hasselt, and from Mariembourg to Hermeton. The employment thus assured to Belgian rolling-works, and secured a few days before the adjudication for the State system, caused the prices of the tenders sent in on that occasion to be somewhat higher than they would probably have otherwise been. The adjudication, however, caused lively attention among Belgian metallurgists, especially as the Government required, for the first time, on the part of the contractor a guarantee of five years. The most favourable conditions were offered by Messrs. De Dorlodot, who appear desirous of securing exclusively the contracts for material needed by the State lines; their tender was at the rate of 5*l.* 17s. 2d. per ton for Vignoles rails, and 5*l.* 14s. per ton for another description. The amount of the rails thus contracted for was 1900 tons altogether. The new condition introduced into the specification, by which the guarantee of the manufacturer is extended to five years, has been considered by the majority of forgemasters as much too severe; and at the last adjudication several establishments held completely aloof in consequence, while others inserted in their tenders a kind of protest against the policy of the Government. The question being one of much importance to the metallurgical and railway interests of other countries as well as Belgium, we re-produce the terms of the specification drawn up by the Government:—"The Administration will receive only rails capable of sustaining a service of five years without any deterioration on the parts of the principal lines worked between stations; and it will assure itself by partial experiments that this condition is fulfilled. The contractor engages in consequence to pay, as regards the whole delivery, an indemnity proportioned to the number of rails which would not stand a trial made on the following conditions:—Ten per cent. at least of the total quantity of rails delivered, selected at various periods of the fabrication, at the choice and discretion of the Administration, will be spread by it equally over the whole extent of its network; and notice will be immediately given to the contractor of their having been laid down, and of the date at which they were placed in position. At the expiration of five years of service the proportion of rails showing symptoms of deterioration in various ways will be duly noted, and this proportion will be applicable to the whole of the delivery, and will determine the number of tons subject to the indemnity. The rate of indemnity will be fixed so as to represent the difference of value between a ton of new rails and a ton of rails past service; the rails to which the indemnity refers remaining the property of the State. The difference will be based on the terms of the contracts entered into at the last public adjudication made by the Administration prior to the expiration of the guarantee. The contractor will have the privilege of delivering new rails to an amount equal to the indemnity, taking as the basis of the price per ton the result of the latest public adjudication. He must indicate his intention in this regard within ten days of the communication made to him that accounts are about to be adjusted; and he must pay the indemnity fixed, either in new materials or in money, within two months from the date of the communication. The Administration is to be at liberty to commence its experiments whenever it may seem good to it to do so; provided always that the adjustment of the indemnity must take place, at the latest, six years after the mean period of the deliveries made at the depôt. The responsibility of the contractor will cease only on the definitive reception, which will be preceded by the inspection indicated above."—The importation of English pig into Belgium, which has always been limited in extent, was slightly—but only slightly—increased last year. The total quantity received was, in 1861, 2000 tons; and last year it rose to 2800 tons. The importation of cast-steel from Sweden and the Siegen district amounted to 404 tons in 1862, as compared with 172 tons in 1861.

From France it is stated that pig produced with pure charcoal has been sold in the Haute-Marne at 5*l.* 18s. per ton, delivered at the Joinville station. The sudden rise which has taken place in this description of pig is attributed to a private speculation, which has placed in the hands of one individual almost the whole of the quantity disposable up to April or May. An artificial scarcity being thus produced, a fictitious rise has been the consequence; we say fictitious, because the high price might well induce some proprietors of blast-furnaces to change their fabrication, in order to produce pig with pure charcoal, which some ironmasters, working with mixed combustible, may possibly do. There has been a fall in the price of iron, rolled mixed irons having been quoted at 9*l.*; charcoal-produced at 9*l.* 8s., and hammered at 10*l.* 16s. to 11*l.* 4s.; the price of castings has not varied. Two furnaces at Chateauvillain, in the Haute-Marne, have just been put out of blast. Important reforms made by the Spanish Government in its Customs tariffs—reforms, however, which still left the duties levied on pig and iron at a very high point—were recently noticed under this head. We now learn that the reductions contemplated and agreed on by the Government have raised loud complaints on the part of the national producers, who have uttered the cry of "Protection to native industry," which in Spain, at any rate, has still considerable power. So violent has been the outcry that the feeble Spanish Government is stated to have been frightened into a suspension of the new arrangements, which should have taken effect on Jan. 1, 1863. If this is the miserable result of the vacillating efforts of a half-convinced administration, Spain will continue to be what she has long been—the laggard of Europe.

The continental metal markets have not displayed much variation since our last report. Transactions, with very few exceptions, have been limited to the supply of the current wants of consumption, and very few changes have been noted in prices. Copper and lead have remained at almost the same rates, but a slight reaction has taken place in favour of zinc. English copper, n

plates, has been quoted at Paris at 99l., tough cake at 98l., Lake Superior at 107l., Chilian at 91l., and Corocoro mineral at 93l. At Havre, Chilian and Peruvian, in bars, has made 89l.; Peruvian mineral (pure standard), 91l.; United States (Baltimore), 98l.; Lake Superior, 103l. to 104l.; Mexican and Plata, in bars, 80l.; Russian, 104l.; old yellow copper, 54l. to 58l., and red ditto, 87l. As regards tin, the quotation for Banca at Paris has been 122l.; Detroit, 121l.; English, 115l. At Havre, Banca has made 122l.; Detroit, 116l. to 118l.; Peruvian, 98l.; Peruvian mineral, 82l. to 88l. The situation of the Dutch tin market was stated as follows at the close of December:—

	1862.	1861.	1860.
Stock, Nov. 23 .... Ingots	73,690	62,028	69,964
Deliveries to Dec. 24	3,950	8,057	4,750
Stock, Dec. 24	69,740	53,971	65,214
Arrived for approaching sale	61,928	73,236	78,678

Spanish lead pig has changed hands at Paris at 22l. 12s.; French, 22l.; Belgian, 22l. At Havre the quotation for Spanish has been 19l. 12s. to 19l. 16s. In zinc, business has been done in rough Silesian at Paris at 18l. 8s., and rolled at 26l. per ton.

M. Tissier, director and founder of an aluminium manufactory at Rouen, has just published a valuable work on the mixture of metals. It is scarcely necessary to recal the fact that the metals most familiarly known, and which change hands the most frequently in commercial transactions, are zinc, antimony, silver, iron, bismuth, mercury, aluminum, lead, gold, copper, platinium, arsenic, and nickel. These metals serve to make a number of alliances, or mixtures, and it is of these mixtures that M. Tissier's book treats. A mixture will be so much the more homogeneous, it is argued, and will approach so much the nearer in its qualities to the characteristics of simple perfect metals, in proportion as the combination of its elements is more close and intimate. To attain this object three conditions are indispensable. It is necessary—first, that the metals sought to be united should have between themselves a sufficient affinity; secondly, that this affinity should be such that they can combine together, and not be confusedly mixed up in almost unlimited proportions, for if the combination can only be made in certain proportions which do not agree with the dose adopted in order to obtain such and such quality, the mixture will tend to separate itself into two portions, one of which will be the defined combination, and the other the metal put in in excess; and, thirdly, that the metals which compose the mixture should be equally fixed, or equally volatile, for if one of them is volatile to the exclusion of the others, it will always have a tendency to escape, and the mixture will be impoverished by being deprived of one of its elements. As regards the mixtures of copper most commonly employed in industrial pursuits—viz., bronze and brass—the principles just laid down have been often misunderstood, or rather not understood at all, on the Continent. This has arisen in great part from the fact that founders have scarcely at their disposal more than two metals—viz., tin and zinc; and they have not troubled themselves to enquire whether these two metals were the most suitable for the purpose to which they wished to apply them, because in business questions of price are paramount to all others, and tin and zinc are the only cheap metals susceptible of forming alliances with copper; platinum, gold, mercury, and silver have not been allied with copper, either because they do not communicate special qualities to it, or because it is necessary in order to obtain such a result to employ a large proportion of those metals—a proportion rendered impossible by their high price. Several efforts have been made at various times to obtain, by the introduction of small quantities of iron and lead, advantageous modifications in the properties of copper and its mixtures; but the results secured have presented little regularity, as was, indeed, to be expected, taking into account the little affinity of iron and lead for copper, which has a tendency to free itself from these two metals. Antimony and bismuth do not furnish available mixtures with copper on account of their great fragility. It has been ascertained, besides, that small quantities of these metals are injurious to the malleability of copper, without introducing any happy modification in its qualities. Arsenic is utilised in the production of certain mixtures; thus, what is known abroad as tombac, or white copper, which serves for the fabrication of buttons, is formed with 97 per cent. of copper, 2 per cent. of zinc, and 1 of arsenic. Arsenic certainly injures the malleability of copper, but not so much as may be imagined. Coppers containing 1·8 or 2·0 per cent. of arsenic, although less ductile than pure copper, are distinguished, nevertheless, by great tenacity. This arsenical copper may be recognised by its greater hardness, its more yellowish tint, and the less tendency which it displays to change when exposed to the action of the air, and sulphurised hydrogen. Thus, if two freshly-broken ingots, one of pure copper, and one of arsenical copper, are placed in an atmosphere containing traces of sulphurised hydrogen, it will soon be seen that the point of fracture of the first will present a marked change before that of the second exhibits any sensible variation in its appearance. We find it impossible this week to do adequate justice to M. Tissier's arguments, but we shall take an early opportunity of continuing our summary of his views and data, which can scarcely fail to interest our readers.

FOREIGN MINES.

EAST DEL REY.—W. Treloar, Sabara, Nov. 28: But few changes have taken place worthy of notice since my last. At Guy's sink we are down about 3⅛ fms. below the adit. We have extended a level to Barboza's sink; the lode here is about 2⅛ fms. wide, and the samples, on the whole, are very encouraging. We are now extending eastward on the lode, and when our 12-head stamps are in order the ores will be conveyed thither. At the Emily Mine the levels in course of driving have been pushed on vigorously day and night.—He further states that the mechanics were busily employed about the pumping-engine, that the water-wheel had been thoroughly repaired, and the shaft secured with timber to the surface, the carpenters' workshop completed, and the ground for the wheel-pit and stamps was being excavated. The timber and some of the axles were lodged on the ground, and everything tending to advance this work was attended to. Native labour continued to be abundant.

SANTA BARBARA.—Captain Bryant (Pari, Nov. 28) states that he had forwarded to Rio de Janeiro, for shipment to this country, the two boxes of specimens referred to in last despatch, and which he hoped would arrive in time for the packet. He had also sent down 39 ozs. 1 dwt. 18 grs. (Troy) of gold to Messrs. Johnston, for transmission to England. There had been 28 tons more of stuff stamped, which yielded 8 ozs. 13 dwts. of gold, being equal to 6 dwts. 4 grs. per ton, showing a rise in the produce of 15 grs. per ton of stuff over what was stamped previously. Although there was no perceptible difference in the stone, but as the yield was better, Capt. Bryant hoped it might continue to increase, and that as the lode opened again the produce would be better. Messrs. Johnston and Sons advise that the gold forwarded by Capt. Bryant had arrived in Rio just as the steamer was leaving, and, consequently, too late to be forwarded per *Tyne*. The samples had not reached them.

EAST KONGSBERG.—D. T. Macdonald, Dec. 26: Sundse: I must remind you that, in consequence of the Christmas holidays, the miners only worked on Monday and Tuesday.—North Sundse: The cross-cut north at the 8 lagter level has been driven 0·57 lagters; the feltoit to east at 10¼ lagter level has been driven 0·42 lagter: the two veins in this feltoit average 1 in. in width, and are separated from each other by a fathom of ground.—South Ramsrud: The feltoit to west from south cross-cut in North Ramsrud, 6¼ lagters from surface, has been driven 0·81 lagters. The forebreast shows two veins; the northern is 6 in. wide.—North Ramsrud: The feltoit to west upon north vein has been driven 0·71 lagter; the vein is 2 in. wide.—Cross-cut North: We drove a bore-hole into the end of the north cross-cut, and at the distance of 7 ft. 4 in. we came upon what we think is the large vein seen in the adit.—Neues Gluck: The adit has been driven 1·1 lagter; there are only 5 ft. 10 in. now to drive before holing into the northern mine. The east skjœrp is ready for sinking and stoping. The malm stamped this week is from the foundation of the old pukvoerk. The stamps were stopped on Tuesday evening on account of the holidays.

NEW GRAND DUCHY OF BADEN.—S. Richards, Jan. 5: The 54 north is now extended 45 fms. 2 ft. 6 in. We have been since last report, and are still, carrying 4 ft. of the same part of the lode, which continues equally promising in appearance and character, and producing about 2l. worth of ore per fm. The stopes in the back of this level are worth 4l. per fm. The stopes in the back of this level, south of the shaft, are worth 8l. per fm. In the 44 north, now extended 84 fms. 5 ft., the drivage is progressing favourably towards winze No. 4 (referred to in my last report), with 1⅛ ft. of the lode producing a little good work, but at present not enough to value. The stopes in the back of this level are worth 6l. per fm. The stopes in the back and bottom of this level, south of the shaft, are worth on an average 9l. per fm. In the 34 north, now extended 110 fms. 1 ft. 6 in., the lode is divided by a horse of the country. We are at present carrying the eastern part, which is 1⅛ ft. wide, and worth 2l. per fm. The small level going south from the bottom of winze No. 4, to meet the 44 north end, is producing some saving work.

LUSITANIAN.—Dec. 27: Palhal Mine—Basto's Lode: At Taylor's diagonal engine-shaft, below the 70, the lode is worth 5 tons per fm. In the 60, west of Taylor's, the lode is 2 ft. wide, composed of quartz and flookan. In the 50, west of Taylor's, the lode is 3 ft. wide, composed of quartz, with a branch of ore worth 1 ton per fm. The 38 west is suspended for the present, and the men removed to drive a 38 fm. level west on a branch gone off in the direction of Basto's lode. The lode in the rise above the 28, against Perez shaft, is 8 in. wide, and poor. In the 18, west of the slide lode, the lode is small, but yielding some stones of ore. In the 8, west of Perez shaft, the lode is 1¼ ft. wide, worth 2 tons per fm. In the adit level, west of Perez shaft, the lode has much increased in size, being now 2 ft. wide, composed of quartz, felspar, and a little flookan. In the 60, east of the River shaft, the lode is worth 1 ton per fm. Francisco's winze, below the adit level, and west of Perez shaft, is holed to the 8, and the men are put to stope above the 8, west of Francisco's winze, where the lode is worth 1 ton per fm. The ore ground in the stopes No. 1 is all worked out, and the men are removed to sink a winze below the 38 to come down in the 50, where the lode is 2⅛ ft. wide, composed of quartz, and a branch of ore worth ⅛ ton per fm. The lode in Perez winze, below the 50, is 1⅛ ft. wide, composed of quartz and flookan. The lode in the stopes No. 2, above the 60, east of Joaquin's winze, is worth 2⅛ tons per fm. In the stopes No. 3, above the adit, west of Perez shaft, the lode is worth 1 ton per fm. In the stopes No. 4, above the 38, east of the Mill lode, the lode is worth 1⅛ ton per fm. In the stopes No. 6, above the 60, east of River shaft, the lode is worth 3 tons per fm. In the stopes No. 7, above the 60, west of Ball's winze, the lode is worth 3 tons per fathom. The lode in the stope No. 8 is worth 2 tons per fm. The stope No. 9, above the 60 fm. level, is worth 1 ton per fm. The stope No. 12, above the 60, west of Taylor's shaft, is worth 3 tons per fm. The stopes No. 16, above the 38, west of Mill lode, are worth ⅛ ton per fm.—Mill Lode: The lode in Barnardo's rise, above the 50, west of River shaft, is unproductive. The stopes No. 15, above the 38, between the caunter and the Mill lodes, are worth ⅛ ton per fm. The stopes No. 11, below the 38, east of Rodenga's winze, are worth 2 tons per fm.—Great Caunter Lode: In the 40, west of Oak shaft, the lode is 1 ft. wide, worth ⅛ ton per fm. In the 30, east of Martinez winze, the lode is 4 ft. wide, spotted with lead, but not enough to value. The rise above the 40, west of Oak shaft, is holed to the winze below the 30 fathom level end, and the men are put to stope above the 40, west of the winze, where the lode is worth ⅛ ton per fm. In the stopes No. 14, above the 30, west of Martinez winze, the lode is worth 1 ton per fathom. In the stopes No. 5, below the 20, east of Martinez winze, the lode is worth ⅛ ton per fathom.—Carvalhal Mine: The lode at the incline shaft, below the 10, is 4 ft. wide, composed of quartz and lead, and of the latter worth 1¼ ton per fm.

The MAUDLIN MINES have been lately inspected by Capt. Rich, of St. Blazey, who reports most favourably on the prospects. It is the unanimous opinion of all practical miners here that the adventurers will now very shortly be handsomely rewarded for their spirited perseverance in developing the ore ground below the immense gossan deposit.

SILVER MOUNTAIN.—In sinking the engine-shaft on this mine we have a course of silver-lead ore that I value to yield from 10 to 11 tons of ore per fm., and as this ore is worth 13l. per ton, the lode will turn out from 130l. to 140l. worth of ore per fathom; the lode is orey for 12 ft. wide, 3 ft. of which is nearly solid.

A phenomenon observed within the last few days at Varages (Varr) would seem to indicate that the recent sudden changes in the weather in the south of France have been accompanied by some disturbance below the surface of the earth. A fine spring, which from time immemorial had supplied the above-named village with water, last week suddenly poured forth a stream of water entirely black and extremely nauseous. This continued for three days, when the water began to clear, and is now as limpid and as sweet as ever.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GREAT WHEAL VOR.—Metal lode, in 1857, with only one shaft, made 20,000l. profit; there are now five shafts working, and all are this week much improved in products.

WHEAL LUDCOTT AND WREY CONSOLS quarterly general meeting of shareholders was held on Thursday last, when the accounts showed a profit of 2517l. 4s., and a dividend of 1l. per share (2400l.) was declared. The sales of lead ores credited amounted to 1917l. 6s. 9d., and silver-lead ores 5071l. 4s. 4d., together 6988l. 11s. 1d. About 780l. worth of lead ores had been sold, but not credited, in this account, otherwise the profit named would have been so much more; and in addition to this there was charged 200l. 13s. for a new boiler. As will be seen from the agent's report, inserted in another column, the mine is in a very satisfactory state, with good expectations of meeting with important discoveries of both silver and lead ores during the next three months. The balance-sheet of Ludcott showed lead and silver ores sold from this mine alone to be 76,155l. 6s. 9d. The meeting was highly satisfactory, and the shareholders present were well pleased with their present position and future excellent prospects.

NORTH ROSKEAR.—I cannot allow your valuable Journal to appear again without making a few remarks upon the extraordinary statements put forth as to the value and prospects of this mine. I have the statement of accounts presented at the last general meeting now before me, and can come to no other conclusion than that the mine is heavily in debt.

LIABILITIES to Sept., 1862—Bankers	£ 953 15 5		
Merchants	1975 18 2		
Lord's dues, &c.	384 11 4	= £3314 4 11	
ASSETS.—Calls unpaid	£ 54 0 0		
Sundries	2 1 11		
Arsenic	45 8 6	= 101 10 5	
Leaving debit balance		£3212 14 6	
Deduct call made Nov. 11		700 0 0	
Leaving		£2512 14 6	
Probable loss on the two last months' working		700 0 0	
Total liabilities		£3212 14 6	

To cover this deficit I consider that a call of at least 5l. per share should be made at the meeting on Tuesday next. Moreover, I am credibly advised by mining agents of great respectability that, whatever may be the future condition of this mine, a further considerable outlay will have to be made in the purchase of machinery; so that before dividends can be expected calls will have to be made to place the mine in a fair working condition.—ANOTHER "CAUTIOUS MAN."

EAST WHEAL FORTUNE is looking well, and promising soon to become a first-class property.

GREAT TYWARNHAILE is to be worked on the Cost-book System, the company having the Earl of Shrewsbury as Chairman, and such men as General Hay on the committee, and no doubt good results will be obtained. A large sum has been expended in erecting machinery, and there is now on the mine an excellent plant, consisting of two 70-in. pumping-engines, with large pitwork, two new whim-engines, one engine for stamping and crushing, and a sufficient plant for working the mine effectually. The samplings will much increase in quantity and quality, as a good discovery has been made in the 90 fm. level.

EAST WHEAL NEPTUNE.—The driving of the deep adit level is being pushed on with all speed, and ere long a first-class lode may be reached.

TRUMPET UNITED MINES.—Shares have been in good demand all the week, upon an improvement in the bottom, or 38 fm. level. The 15 has been driven several fathoms, upon a lode worth 10l. per fm. for tin, and the 25 and 38 fm. levels are 1⅛ fm. only behind this run of ground; in the latter level the lode is now worth 5l. per fathom, and improving, whilst the lode in the shaft (which is now down to the 48) presents every indication of a rich deposit of tin being not far distant. The mine is in 4000 shares, which at 8s. each, their present price, is 1600l. only for the mine. There is ample machinery, and the mine is at present being worked at a monthly loss of about 100l., and as soon as the 38 and 25 fm. levels are driven under the ore ground in the 15 it is expected the returns will fully meet the costs.

BUCKFASTLEIGH.—At East Brookwood a new lode has just been intersected, producing very fine specimens of copper ore. There are now about 3 fms. more to drive the cross-cut to reach the main lode, which the adit level has been driven on.

WHEAL SETON.—The sump-winze on north caunter lode, in bottom of the 140, is down 5 fms., and will produce 25 tons of rich ore per fathom; the winze opposite Tilly's shaft 10 tons; the winze in the bottom of the 140, on Prideaux's lode, 8 tons; the winze in the bottom of the 110, 10 tons. The lodes will be seen at the 150 in about three months.

EAST BASSET.—The tin lode has much improved, and the returns from this quarter will increase. There is no improvement to notice in the copper department.

GREAT SOUTH TOLGUS.—The water is again drained from the bottom of Lyle's shaft; they are sinking on an excellent course of tin, and no doubt it will prove, as many of the best mines in this district, a good and lasting mine for tin beneath the courses of copper ore.

WHEAL RRETH is again attracting much attention in Cornwall. The 180, west from Frederick shaft, is worth 45l. per fm. From the present prospects the mine is likely to figure in the Dividend List in the present year.

EAST RUSSELL has improved in the 120 and other levels, and the mine, on the whole, looks very promising. There have again been sampled 238 tons of good quality copper ore, the produce of November and December.

ST. IVES WHEAL ALLEN continues to look very promising.

WEST PAR.—The lode in the 30 fm. level east has much improved.

DEVON AND CORNWALL is looking extremely well. Large quantities of ore are at present being sold, and there is every prospect of the sales increasing. No adventurers could be more deserving of success; they have spent a large amount in mines, and although they have not yet had any great success, they appear now to be on the eve of prosperity. The managing agents—Capts. Neill and Horswill, and the secretary, Mr. G. Down, have performed their duties well, and this, with the unanimity of the adventurers, is now crowned with success.

HINGSTON DOWN has much improved, and is likely to be a trump in 1863. Had it not been for sinking the new shaft, the company's financial position would have been much better, but this shaft, when completed, will be a great thing for the mine. At present the ground is easier, and opening out well. They have sampled nearly 400 tons, which will leave a profit, and no doubt future samplings will be larger.

WEST BEAM.—The discovery in the bottom of this mine inspires the utmost confidence; it re-assures the desponding, and places the future well-doing of the mine beyond doubt. The results under the present management have been eminently satisfactory, as it was generally supposed and believed the mine was worked out, and that attempting to find tin, was "scraping an egg-shell,"—10 tons of tin per month proves otherwise.

SMITH'S WOOD MINE still continues its lately-cut branch of rich copper ore; the specimens forwarded to the offices in Manchester have given great pleasure to the shareholders who have seen them, and not without cause.

THE CARADON DISTRICT.—Among the mines in this celebrated district there is not one deserving so much attention, at present price of shares, as Great Caradon, in 4096 shares, 2l. called up. It is due east of, and only 660 fathoms from, South and East Caradon boundary, consequently it embraces the same rich lodes. In driving cross-cuts in the 40 fm. level, three lodes were met with containing copper ore. The shaft is now down to the 60 fm. level; cross-cuts will be immediately put out north and south, and should the lodes, when intersected, prove rich for ore, shares will have a great rise. There is little doubt but the East Caradon caunter and other lodes pass through the sett, time and a small further outlay being only required to develope the property, and, it is fully believed, bring the mine into a paying state.

EAST CARADON.—At the inspection, on Wednesday, one agent valued seven ends, driving on the course of the different lodes, to be worth 35l. per fm.; and the reserves opening up at the present time over 3000l. monthly.

WHEAL SETON.—The winze below the 142 has never looked so well, and is opening up as fine a course of ore as ever was seen in the mine since the commencement. The writer inspected the mine a short time since, and is of opinion it will be among the dividend mines for years to come.

NORTH DOWNS.—No improvement has taken place in the 60; the ore above this level has made over the elvan, but, so far as explored, very little ore has been found in this and the adjoining mines under the elvan. I am of opinion when the lode in Bennett's shaft forms a junction with the other lodes, which will be the case in a few fathoms, much better results may be anticipated. The mine is well laid out.

EAST CARN BREA.—The levels in this mine have rather fallen off, but there are some improvements anticipated from two or three points shortly.

WEST CWMSYMLOG (Cardiganshire).—Capt. Charles Williams writes:—"You are aware that we cut into the Great Daren lode here on Oct. 16. I then stated that I considered it a very great discovery, looking at the district and situation of the mine, adjoining the Cwmsymlog, where Sir Hugh Myddleton realised 25,000l. a year profit by very simple appliances. I am now in the new year glad to be able to inform you that we have cut through a lode of lead and copper ore of a profitable character for 30 feet wide,—samples of both metals I forward to you. We now are erecting machinery for crushing the ore, the only thing wanted to enable us to get to market with regular supplies.

GREAT NORTH TOLGUS.—Capt. Cornwall Henwood writes as follows:—"I am putting in the bobs rather heavier than we decided upon; they are 30 feet long, 17 in. wide, by 12 in. deep. I have also decided upon 2-in. round iron rods; as I find, by my calculations, they will be cheaper and better than wood; they will travel about 18 in. above the surface. Let me know if you agree with me. I am happy to inform you that we have an excellent lode in the flat-rod shaft, containing a rich branch of ore on each wall, and indicative of a large amount of ore below. The water increases, which is another symptom of an extensive formation of ore, and it decides us to press on our preparations for carrying our pumping power into the shaft, where we have this good discovery of copper." Every friend of mining will be glad of shallow mines like the Great South Tolgus, in such a good mining district as Redruth, becoming so promising for the promoters and all concerned in it. It adds another satisfactory link to the evidence that mining undertakings are neither commenced nor carried on now-a-day with that invulnerable ignorance, or that miserable trust-to-chance, that it is occasionally represented to be,—on the contrary, with an honest use of the power of selection, such as has been exercised in this mine, there seems to be very little chance of its proving a failure,—in fact, the lode yielding 2 tons of good copper ore only a short distance below the adit, on Wheal Mary lode, speaks more for the mine than all the verbal arguments that could be used in its favour.

BRYN HOPE (Cardiganshire).—Capt. Thomas Williams writes:—"We are sinking the winze from the 5 fm. level down to the 10, in the best ore—we have not yet seen this ore in the 10. We are driving east of the Flap-jack shaft, on a good orey lode, principally on the north wall. I have this week examined the old burrow in Bryn Hope shaft; the stuff broken there in the waste heap is full of ore, and I am persuaded the shaft has passed through the ore, the old miners keeping it more perpendicular than the lode, which must be cross-cut in the 20. I will let Lord Lisburne know, through Mr. Burman, his agent, that we shall erect the dressing-floors on his lordships own land. I think we shall find a good lode of ore here."

EAST ROSEWARNE sold 118 tons of copper ore on the 8th, producing 1004l., or nearly 9l. per ton. Capt. C. Thomas has inspected the mine, and speaks highly of the prospects. In the 55 west they have a course of ore worth 40l. per fm.; the stope in the back 30l. per fathom; lode in Hallet's shaft worth 20l. per fathom; the 65 east 12l.; and the 65 west 15l. This is considered to be one of the most promising young mines in the neighbourhood of Camborne.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

3 Billins, £15¼.	5 Great Caradon, 26s. 3d.	1 St. Ives Consols, £27¾
3 Bryn Gwiog, £32¾.	10 Hingston Down.	30 So. Car. Hooper, 17s.
1 Basset, £83⅛.	25 Holmbush, old shs., 30s.	3 Silver Rake, £4¼.
5 Clifford Amal., £19 18 9	15 Lady Bertha, 24s.	30 St. Just United.
3 Cook's Kitchen, £32⅝.	10 Ludcot, £9 8s. 9d.	20 Tolvadden, £3 6s. 3d.
5 Cobre, £20⅞.	3 Long Rake, £16 6s. 3d.	5 Trencrom.
2 Cargoll.	10 Marke Valley, £8⅝.	1 Trelawny, £17⅛.
30 Cape of Good Hope.	50 Molland, 5s.	20 Tincroft.
1 Condurrow.	50 No. Dolcoath, £1 18s 9d	30 Treweatha, 9s. 9d.
2 Calvadnack, £5⅞.	5 North Basset, £3 3s. 9d.	100 Tamar, 17s. 3d.
1 Carn Brea, £63⅛.	50 Montes Aureos, £2 11s 3d	10 Treloweth, 6s.
15 Caradon Hill, 27s.	50 Mariquita, 17s. 9d.	20 Trumpet United, 8s. 3d
3 Caradon Cons., £12¼.	5 No. Treskerby, £4 3s 9d	5 United Kingdom Telegraph Company, £3¼
30 Carnewas, 19s. 9d.	1 New Seton, £150⅛.	
50 Dale.	5 North Roskear.	100 Ud. Mexican, £5 16s. 9d.
50 Drake Walls, 21s.	70 North Minera.	50 Vale of Towy, 6s. 6d.
1 Devon Gt. Con., £505.	10 No. Downs, £2¾.	100 Worthing, 10s. 9d.
5 East Russell, £4 8s. 9d.	20 North Crofty, £5 2s. 6d.	1 Wheal Seton, £238.
10 East Carn Brea, £11⅛.	100 North Rhine, 7s. 6d.	2 W. Caradon, £29¼.
50 East del Rey, £2 1s. 9d.	50 Nant-y-Iago.	10 Wheal Union, £5 18s 9d
1 East Darren.	50 New South Caradon.	1 West Seton, £287½.
20 East Seton, 10s.	1 Providence, £41 18s. 9d.	1 Wh. Mary Ann, £15 8s 9d
50 East Clogau (fully paid), 19s.	100 Port Phillip, £1 12s.	30 Wheal Unity, 12s. 9d.
	50 Quebrada.	20 Wh. Grenville, £4 18 9
5 East Rosewarne, £2 14s.	5 Rosewarne Cons., £3 3 9	5 W. Condurrow, £4 6 3
20 East Grenville, 50s. 6d.	30 Redmoor, 4s. 9d.	20 West Trevelyan, 9s.
5 East Caradon, £45 18s 9d	30 St. Day United, 10s. 6d.	5 Wheal Uny, £7¼.
1 East Basset, £55¼.	1 South Frances, £91¾.	1 West Sharp Tor.
20 Fortuna, £4 8s. 9d.	10 Rosewarne United, 20s.	40 Yudanamutana, £3 13 9
50 Great Retallack, 10s. 9d.	1 So. Caradon, £390.	5 West Basset, £13¼.
50 Gt. North Cop., 12s. 6d.	50 Santa Barbara, 20s. 9d.	10 Wheal Tremayne.
2 Great Fortune, £31⅛.	5 St. John d. Rey, £55⅛.	20 Wheal Harriett, £3 13 9
5 Great Wh. Vor, £6 6s 3d	2 Stray Park, £39.	2 Wheal Grylls.
5 Gt. So. Tolgus, £7¼.	50 Sortridge, 9s.	

And is a BUYER of 20 shares (or any part) in Bryn Gwiog at £31¾, 20 Tincroft at £13⅛, 20 North Roskear at £60, 1 Devon Great Consols at £500, 3 Wheal Margaret, 100 Treweatha, and 300 North Minera.

It is with considerable satisfaction that I regard the result of my selection of mines for 1862, which according to my annual custom I now publish. Many years' experience having convinced me that mining adventure was not only a legitimate source of investment, but under skilful advice one of the most profitable, I made in 1858 a carefully selected list of mines, and published the result in the *Mining Journal* at the close of the year. I have continued this plan with the following results:—

1858—Dividend Mines	23 per cent.	1858—Progressive Mines	42 per cent.
1859 „ „	47 „	1859 „ „	62 „
1860 „ „	16 „	1860 „ „	45 „
1861 „ „	29 „	1861 „ „	22 „
1862 „ „	70 „	1862 „ „	35 „

The dividend mines thus making upon the five years an average profit of 37 per cent., and the progressive of 41 per cent. In order to make a fair average calculation, I have assumed that as near as possible £300 be invested in each dividend, and £100 in each progressive mine. The above calculation, embracing a period of five years, effectually proves that success in mining is not entirely owing to chance, but that when capital is judiciously invested a return may be expected far exceeding any other mode of investment. In my last circular I stated that I thought that my selection of progressive mines for 1862 would show a larger percentage of profit than that of the preceding year, which has proved correct. I cannot hope that the dividend mines will next year show such a large profit as for the present, 70 per cent. being more than can reasonably be expected, but I am confident that it will prove equal to the average of the last five years.

The only failure in the progressive mines is, I regret to say, Old Tolgus United, arising from circumstances to which it is unnecessary here to allude, but with which the shareholders are well acquainted. As a mining speculation, my opinion remains unchanged. Hitherto the principal investors in British mines have been clergymen, professional gentlemen, and those who have no means of employing their capital in mercantile pursuits; but when it becomes generally known that instead of being as hazardous as formerly supposed, that results like the above may with confidence be anticipated, then bankers, merchants, &c., who have in a great measures remained aloof from this species of enterprise, will eagerly embrace the advantages which it offers as a channel for the investment of spare capital.

My list for this year will be printed in a few days, when a copy will be forwarded, as usual, gratis to all those for whom I have transacted business, while to others a charge of one guinea will be made, which will be returned should business result.

DIVIDEND MINES.

Date.	Mine.	Shs.	Mkt. value	Outlay.	Divs. declared.	Price since obtainable.	Gross Amount.
Jan. 30, 1862	Anglo-Mexican Mint.	22	£ 14	£308 0	£ 35 4	£ 18	£431 4
„	Copper Hill	3	95	28 5	21 0	90	291 4
„	Cwm Erfin	15	20	300 0	26 5	17	281 5
„	Cook's Kitchen	11	29	31 9	7 14	33	370 14
„	Carn Brea	4	70	280 0	16 0	67¼	286 0
„	Dolcoath	1	550	550 0	45 0	590	635 0
„	East Caradon	10	30	300 0	23 15	Sep. 13, 54	563 15
„	Herodsfoot	8	39	312 0	42 0	49	434 0
„	Marke Valley	30	10	300 0	21 0	10¾	343 10
„	Minera	2	170	240 0	43 10	200	443 10
„	Providence........	7	44	308 0	31 10	41	318 10
„	South Caradon	1	325	325 0	30 0	Oct. 400	430 0
„	St. John del Rey	5	64	320 0	42 10	56	322 10
„	Wheal Ludcott......	120	2½	300 0	—	July 5, 21	2520 0
	Total..............			£4447 0	£398 8		7690 18
	Total outlay						4447 0
	Total profit, or about 70 per cent.						£3243 18

PROGRESSIVE MINES.

Date.	Mine.	Shs.	Mkt. value.	Outlay.	Calls.	Price that could be obtained during the year	Market value.
Jan. 30	Bryn Gwiog	4	£26	£104	—	Feb. 8, £ 30 0 0	£120 0
„	East Grenville ..	80	1¼	100	£20	June 28, 2 16 0	224 0
„	New Seton	2	55	110	18¼	Oct. 24, 155 0 0	310 0
„	North Roskear ..	4	24	96	8	53 0 0	212 0
„	North Minera ..	115	⅞	100⅝	—	Feb. 15, 1 1 0	120 15
„	North Basset....	30	3¼	97½	—	July 12, 4 10 0	135 0
„	Old Tolgus......	16	6	96	60	0 16 0	12 16
„	Rosewall Hill ..	28	3½	98	—	Aug. 28, 4 10 0	126 0
„	South Carn Brea.	28	3½	98	21 7s.	3 10 0	98 0
„	Stray Park......	3	31	93	6	Nov. 22, 44 0 0	132 0
„	South Basset....	10	10	100	12½	May 12, 12 10 0	125 0
„	Caradon Hill....	115	⅞	100⅝	28¾	1 5 0	143 15
„	Worthing	190	10s 6d	99¾	—	June 14, 0 13 9	130 12
„	West Sharp Tor..	2	48	96	6	May 10, 82 0 0	164 0
	Total..................			£1389¼	181 2		2053 18
	Deduct calls						181 2
	Leaves						£1872 16
	Original outlay						1389 10
	Profit equal to 35 per cent.						£ 483 6

2, Adam's-court, Old Broad-street, Jan. 9, 1863.

Bristol Mining School.

BRISTOL MINING SCHOOL.

(ESTABLISHED 1852).

The NEXT SESSION COMMENCES on MONDAY, JANUARY 12, 1863.

PRESIDENT.

HANDEL COSSHAM, Esq., F.G.S., Shortwood Lodge, near Bristol.

VICE-PRESIDENTS.

LIONEL BROUGH, Esq., F.G.S., Her Majesty's Inspector of Mines, Clifton.
GEORGE C. GREENWELL, Esq., F.G.S., Radstock.

The object of the Bristol Mining School is to instruct young men intended for mining pursuits in the sciences allied to their future profession.

This school offers peculiar advantages—It is in the centre of the active mining operations in the Gloucestershire and Somersetshire Coal Fields; its pupils have the use of one of the best provincial Geological and Mineralogical Museums; there is a spacious Laboratory; and its staff is larger than any school of the kind except that in the metropolis. The following are the subjects taught:—

CHEMISTRY	THOMAS COOMBER, F.C.S., Head Master.
CHEMICAL ANALYSIS	
ASSAYING	
PHYSICAL SCIENCES	
PRACTICAL, PLANE, AND DESCRIPTIVE GEOMETRY	Mr. WILLIAM ROWDEN.
MACHINE DRAWING	
MECHANISM	
GEOLOGY AND MINERALOGY	Mr. HUGH FULTON.
NATURAL HISTORY	
MINING ENGINEERING	M. GILDROY STEWART, Civil and Mining Engineer.
SURVEYING	
LEVELLING	
DIALLING	
PLOTTING AND PRACTICAL MINING	

The pupils accompany Mr. Stewart in weekly visits to the numerous mines in the neighbourhood, for the purpose of studying practical mine engineering and dialling. Mr. Stewart also teaches surveying and levelling in the field.

Geological excursions are made under the guidance of Mr. Fulton, the neighbourhood being a highly interesting one, regarded in connection with that subject.

The work of the school is annually tested by the examination of the department of Science and Art. In the last examination the pupils took a high position.

Fee, 15s. per quarter.

All communications to be addressed to the Secretary, Bristol Mining School.

Sheffield School of Practical Science and Metallurgy.

SHEFFIELD SCHOOL OF PRACTICAL SCIENCE AND METALLURGY.

PRESIDENT.

His Grace the DUKE OF DEVONSHIRE, K.G., F.R.S., D.C.L., Chancellor of the University of Cambridge.

VICE-PRESIDENTS.

The MAYOR OF SHEFFIELD, JOHN BROWN, Esq.
The MASTER CUTLER.
The Right Hon. LORD WHARNCLIFFE.
Sir DAVID BREWSTER, K.H., D.C.L., F.R.S.L. and E., M.R.I.A.
Sir RODERICK MURCHISON, F.R.S., Director of the Royal School of Mines.
JOHN PERCY, Esq., M.D., F.R.S., Professor of Metallurgy in the Royal School of Mines.
WILLIAM FAIRBAIRN, Esq., C.E., F.R.S.
ROBERT HUNT, Esq., F.R.S., F.S.S., Keeper of Mining Records.
WARINGTON W. SMYTH, Esq., M.A., F.R.S., Professor of Mining and Mineralogy in the Royal School of Mines.

DIRECTOR.

The Rev. G. B. ATKINSON, M.A., Principal of the Collegiate School; late Fellow and Assistant Tutor of Trinity Hall, Cambridge.

PROFESSORS.

CHEMISTRY, METALLURGY, AND GEOLOGY—JAMES ALLEN, Ph.D., F.C.S. of the Universities of Giessen and Berlin.
ENGINEERING AND MINING—J. THOMPSON, C.E.
MATHEMATICS, NATURAL PHILOSOPHY, AND APPLIED MECHANICS—Rev. G. B. ATKINSON, M.A.

The Sheffield School of Practical Science and Metallurgy will afford a complete scientific and practical education to students who are destined to become civil, mechanical, or mining engineers, or manufacturers of any kind. Its object is thoroughly to discipline the students in the principles of those sciences upon which the operations of the engineer, metallurgist, or manufacturer depend.

The education will be given by means of systematic courses of lectures, by catechetical class instruction, by practical teaching in the laboratory and drawing room, and occasionally by field excursions.

The School of Practical Science and Metallurgy will be conducted in the buildings of the Sheffield Collegiate School. The two Institutions, although both under the superintendence of the Rev. G. B. Atkinson, Principal of the Collegiate School, are, however, entirely distinct.

A detailed prospectus, containing syllabuses of all the courses of lectures, and all other information, arrangements for boarding, &c., may be obtained by application to the director.

THE SCHOOL WILL OPEN IN THE FIRST WEEK IN FEBRUARY, 1863.

GEOLOGY—KING'S COLLEGE, LONDON.—

PROF. TENNANT, F.G.S., will COMMENCE a COURSE of LECTURES on GEOLOGY on FRIDAY MORNING, January 23, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday, at the same hour. Fee, £2 12s. 6d.

R. W. JELF, D.D., Principal.

ALVERTON HOUSE ACADEMY,

36, UPPER PARLIAMENT STREET, LIVERPOOL.

Conducted by Mr. W. RICKARD,

Teacher of Practical Mining and Engineering in the late Mining School of Cornwall, assisted by efficient masters.

The instruction at this establishment combines the usual requisites of a superior Classical, Mathematical, and Commercial Education, with a systematic course of Civil and Mechanical Engineering, Drawing, &c., while the Sciences of Natural Philosophy, Chemistry, Mineralogy, Geology, and Astronomy are amply explained and illustrated.

VACANCIES for TWO or THREE BOARDERS.

Prospectuses, with terms, testimonials, and references will be forwarded on application.

The SCHOOL will be RE-OPENED on MONDAY, the 19th of January, 1863.

PLYMOUTH BOARDING HOUSE

(SELECT), 36, PORTLAND SQUARE.

INVESTMENT.—Mr. THOMAS SPARGO, STOCK, SHARE,

and MINING BROKER, Nos. 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., publishes, every Wednesday, a GUIDE to BRITISH and FOREIGN MINING, and OTHER INVESTMENTS, which should be consulted by all capitalists. Post free on receipt of six stamps.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and

MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, on commission only, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. HORLEY and Co. publish a Weekly Mining List, with the closing prices every Wednesday, and will be most happy to forward the same (gratis) on application.

JAMES H. COCK, MINE SHAREBROKER AND DEALER,

REDRUTH, CORNWALL.

J. H. COCK, having had 10 years' experience in the mining market, and being thoroughly acquainted with mines and their management, is in a position to advise or do business on the most advantageous terms. Cash or time bargains promptly attended to.

MR. T. H. ANDREW, MINE BROKER, LELANT,

HAYLE, CORNWALL.

Business at all times in Providence, East Providence, Margaret, Kitty (Lelant) Trencrom, St. Ives, Treiyon, Rosewarne Consols, Rosewall Hill, &c.

MANCHESTER.

MR. W. HANNAM: OFFICES, CARLTON BUILDINGS,

COOPER STREET, MANCHESTER.

MINING, SLATE QUARRYING, INSURANCE, and GENERAL STOCK and SHAREDEALER.

A monthly investment Circular on application.

Sharedealing in this office is limited to special mines, and companies whose pretensions have been personally investigated, and to the dividend-paying mines ordinarily dealt with on the London market, and for the latter purpose arrangements have been made for the earliest information from the great mining districts. There can be little doubt that in dealing with well-established, dividend-paying mines, investors, without any greater risk than accrues from purchase of railway or house property, receive a much larger regular profit than from any other species of investment, free from all trouble, and paid in the most convenient form for those who have limited incomes—viz., every two or three months; while those who enter into new undertakings, such as progressive mines, have the knowledge that nothing which is not *bona fide*, and has stood the test of thorough examination, is submitted to them. It cannot, of course, be expected that where the profits are so enormous that these latter investments should be entirely free from risk. All that can be done is to ascertain the respectability of the management, and the value of the prospects. This done, no speculations are likely to be so valuable as those in mining operations; it being no uncommon occurrence for shares to rise in value 200 and 300 per cent. in a few months.

BRITISH AND FOREIGN STOCK, SHARE,

AND MINING OFFICES.

Messrs. T. FULLER AND CO., 26, CHANGE ALLEY, CORNHILL, LONDON, TRANSACT BUSINESS in EVERY DESCRIPTION of SHARES in BANKS, RAILWAYS, CANALS, INSURANCE, MINES, and GOVERNMENT STOCK. Dividends received, calls paid, and every class of Stock Exchange business effected.

There being a considerable amount of money locked up in shares not prominently before the public, and consequently difficult of sale, Messrs. T. FULLER and Co. invite the holders of such stock to communicate with them, having channels for the disposal of every description of shares.

FOR SPECIAL SALE:—Shares in an established company (limited), the property freehold; and in several mines which pay regular dividends of 12½ to 20 per cent.

Messrs. FULLER and Co. having had upwards of 20 years' experience in the mining market, prompt them to point out shares in certain progressive mines as prizes for the year 1863.

Telegraphic messages promptly attended to.

Commission, 1½ per cent.

Bankers: Metropolitan and Provincial.

TO ADVENTURERS IN FOREIGN MINES.—Mr. HARRY

THOMAS VERRAN, of PLACENTIA, NEWFOUNDLAND, who has had considerable experience (under the tuition of his father, and in connection with many other experienced Mining Engineers) is ready to UNDERTAKE the EXAMINATION and REPORTING upon MINERAL PROPERTIES in Newfoundland, the United States, or any other country, where his services may prove useful to capitalists. The greatest confidence may be placed in Mr. VERRAN, who will use his best judgment in giving reliable information to those who may repose confidence in him.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL SICILY MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 31st day of December last, on the petition of Edward Cooke, a creditor of the said company, it was ordered that the said Wheal Sicily Mining Company should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

HODGE, HOCKIN, AND MARRACK, of Truro, Cornwall (Solicitors for the said Petitioner).

Dated this 2d day of January, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL NELSON MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 31st day of December last, on the petition of William Northen, of No. 14, Vauxhall-walk, Lambeth, in the county of Surrey, a contributory of the said company, it was ordered that the said Wheal Nelson Mining Company be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

HENRY SEWELL STOKES, of Truro, Cornwall (Solicitor for the said Petitioner).

Dated this 2d day of January, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the BUDNICK CONSOLS MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 31st day of December last, on the petition of George Houghton Arnall and Thomas Hamilton, both of the borough of Truro, within the Stannaries, contributories of the said company, it was ordered that the said Budnick Consols Mining Company should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

And the Vice-Warden thereby appointed William Polkinghorne, of Par, in the county of Cornwall, official liquidator of the above-named company, until the further order of the said Court.

HODGE, HOCKIN, AND MARRACK, of Truro, Cornwall (Solicitors for the said Petitioners).

Dated this 2d day of January, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

PURSUANT to an Order made in the Cause of Trudgan and Others *v.* Pascoe, the CREDITORS in RESPECT of SOUTH BULLER AND WEST PENSTRUTHAL MINES, in the parish of Gwennap, within the said Stannaries, are, on or before the 21st day of January inst., to COME IN and PROVE THEIR DEBTS before the Registrar of the said Court, at his office in Truro, or, in default thereof, they will be PEREMPTORILY excluded the benefit of the said Decree.

Dated Registrar's Office, Truro, January 7th, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Devon.

IN RE FURZE HILL WOOD MINE.

TO BE SOLD, pursuant to two several Orders made in the respective Causes Betteley *v.* Pomroy and Others, and Betteley *v.* Hosking and Others, and dated respectively the 2d day of October last, and the 1st day of November last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 21st day of January inst., at Twelve o'clock at noon precisely—

100 (6000ths) SHARES of the defendant Thomas Pomroy.
10 (6000ths) SHARES of the defendant John Hoskin.
5 (6000ths) SHARES of the defendant George Rowe.
107 (6000ths) SHARES of the defendant Henry Hosking; and
50 (6000ths) SHARES of the defendant Henry Haitt,

Of and in the said MINE.

JOHN GILBERT CHILCOTT, Solicitor, Truro (Agent for Edward Chilcott, Plaintiff's Solicitor, Tavistock).

Dated Registrar's Office, Truro, January 6, 1863.

In Chancery.

IN the MATTER of the JOINT-STOCK COMPANIES WINDING-UP ACTS, 1848 and 1849, and of the TRETOIL AND MESSER MINING COMPANY.

MR. E. H. LIDDELL, Auctioneer, has received instructions from F. Whinney, Esq., the official manager of the above company, to SELL, BY AUCTION, on Thursday and Friday, the 15th and 16th of January, 1863, at TRETOIL AND MESSER MINE, Cornwall, about two miles from Bodmin, the PLANT, MACHINERY, and EFFECTS thereon, viz.:—

A 36 in. cylinder PUMPING ENGINE, and TWO BOILERS 18½ tons.
A 22 in. cylinder STAMPING ENGINE, with 24 heads of stamps attached.

A water-wheel and stamps, capstan, capstan rope, shears, balance bob, pitwork, and other effects of an extensive mine, full particulars of which are given in handbills.

The whole of the materials, &c., on the mines will be first offered in one lot, and if not so disposed of the engines, and the other more valuable articles, will be sold on the first day, and the remainder on the second day.

Catalogues, with further particulars, may be obtained of Messrs. VALLANCE and VALLANCE, solicitors, Essex-street, Strand, London; Messrs. HARDING, PULLEIN, WHINNEY, and GIBBONS, accountants, 5, Serle-street, Lincoln's Inn, London; Capt. RICH, on the mine; or of the Auctioneer, at Bodmin, four days before the sale.

The sale to commence at Eleven for Twelve o'clock precisely.

Dated Bodmin, December 26, 1862.

TUESDAY, JANUARY 20, 1863.
EAST TREFUSIS MINE, REDRUTH, CORNWALL.

MR. JOHN BURGESS (Auctioneer, &c., Barncoose), is instructed to SELL BY PUBLIC AUCTION, on Tuesday, January 20, 1863, at Eleven o'clock in the forenoon, at EAST TREFUSIS MINE, in the parish of REDRUTH, the whole of the EXCELLENT MINE MATERIALS, viz.:—

A 28 in. CYLINDER PUMPING-ENGINE, with 8 ton BOILER, all in good condition;

2 balance bobs, one with new oak beam, best iron straps and brasses.	2 6 ft. 5 in. door pieces.
1 8 arm capstan and shears, and capstan chain, ⅝ to ⅞.	3 10 ft. working barrels, 8, 5½, 4½ in.
2 horse whims and shaft tackles.	3 H and X top door pieces.
300 fms. whim chain.	3 plunger cases.
800 fms. ½ in. to 7-16ths chain.	4 plunger poles.
37 9 ft. 9 in. pumps.	3 stuffing boxes and glands.
33 9 ft. 6 in. ditto.	10 bucket prongs.
14 9 ft. 5 in. ditto.	76 fms. best iron bucket rods, 1, 1¼ in.
2 8 in. sinking windbores.	85 fms. 7 in. wood rods, with strapping plates, complete.
3 6 ft. 9 in. flat bottom windbores.	23 fms. 6 in. ditto.
4 windbores, 4½, 5, and 5¼ in.	80 fms. 1¾ in. flat rods, pullies, & stands.
3 12 ft. 8 in. working barrels, good.	180 fms. iron stave ladders.
3 6 ft. 8 in. door pieces.	180 fms. of wood and zinc air pipes.

SHOP.—Double power crab winch, jack, and two sets of double and treble sheave blocks; 1 36 in. smith's bellows, old and new iron, borer steel, screw stocks, vice, and boring machine, smiths' and miners' tools, carpenters' bench, grindstone, &c.

A large quantity of new and old timber, good plank, whole timber, half and quarter timber, in lots.

For any further information, apply to Capt. HOSKING, agent, on the Mine; or the auctioneer, Barncoose, Redruth. Sale to commence at 11 A.M. precisely.

Dated January 7, 1863.

GREAT WHEAL ALFRED, HAYLE, CORNWALL.

MR. BURGESS, Auctioneer, Barncoose, Redruth, WILL SELL, BY PRIVATE CONTRACT, at GREAT WHEAL ALFRED, HAYLE, CORNWALL,

ONE 65 in. cylinder PUMPING ENGINE; ONE BOILER and fittings, about 12 tons; first piece of main rod caps and brass.

ONE 25 in. cylinder ENGINE for WINDING and CRUSHING; ONE CRUSHER in excellent order.

ONE 47 in. cylinder ENGINE and BOILER. PUNCHING MACHINE, BORING MACHINE, and SCREWING MACHINE.

2 capstans, 2 capstan ropes, 20 and 21 in. pumps, H pieces, doorpieces, matchings, tram wagons, skips, kibbles, new shaft gig, &c.; mandril, lot of double faggotted iron, with many other things.

For any further information, apply to DAVID COHEN, Esq., 5, Bank Chambers, Lothbury, London; or to JAMES HOLLOW, Esq., Lelant, Hayle, and 1, Crown-court, Broad-street, London.

COMPRESSED FUEL WORKS (Ashcroft's Patent), ABERDARE, GLAMORGANSHIRE, with the PLANT and MACHINERY and LETTERS PATENT; also, a LEASEHOLD COTTAGE and WORKSHOP at CARDIFF.

MESSRS. FULLER AND HORSEY are instructed to SELL BY AUCTION, on Tuesday, January 20, 1863, at Twelve o'clock, at the Auction Mart, London, in Two Lots, the FUEL WORKS, together with the PLANT and MACHINERY and Letters Patent, belonging to the ABERDARE PATENT FUEL COMPANY (LIMITED), at Aberdare, about half a mile from the Tresman station of the Aberdare Railway.

The land upon which the works are erected occupies a site of about three acres, and is held from the Marquis of Bute, for a term of 60 years, at a ground rent of £50 per annum. It has a considerable frontage next the Aberdare and Glamorganshire Canal, and two lines of railway (broad and narrow gauge) run within a few yards of the property. The works were constructed in 1859, and comprise the FUEL FACTORY, fitted (under Ashcroft's patent for improvements in working hydraulic presses, by which a much accelerated speed is obtained, and power saved), with a very powerful double cylinder HYDRAULIC FUEL PRESS, capable of compressing 100 tons of fuel daily; twelve FUEL MIXING MACHINES, with furnaces, pair of crushing rolls for pitch, and all requisite apparatus, worked by THREE HORIZONTAL STEAM-ENGINES, with TWO STEAM-BOILERS; a range of brick-built shops, for engineers, carpenters, and smiths, fitted with valuable and modern tools, including LATHES, PLANING and DRILLING MACHINES, worked by a separate STEAM-ENGINE, benches, forges, &c.; an office; coal receiving shed, with screens; wharf, with stone quay wall, about 120 ft. long, yards intersected with iron tramways, and manager's house, with garden and ground. Coals may be procured from adjoining collieries at 1s. per ton. With this lot will be included the Letters Patent for Great Britain and Ireland, dated April 15, 1859, for "Improvements in working presses and other hydraulic machines."

LOT 2 will comprise the LEASEHOLD INTEREST in a brick-built WORKSHOP, fitted with BOILER and STEAM-ENGINE; also, a COTTAGE and LAND, situate at MAINDY BANK, about one mile from Cardiff, and on the banks of the Glamorganshire Canal. The workshop, cottage, and land are held for the remainder of a term of 21 years, at a rent amounting to £24 6s. per annum.

To be viewed till the sale. Particulars may be had at the Angel Hotel, Cardiff; the Westgate Hotel, Newport; of Messrs. COURTENAY and CROOME, solicitors, 9, Gracechurch-street, London, E.C.; at the Mart; and of Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

MINE SHARES.

MR. BAKER WILL SELL, BY PUBLIC AUCTION, at Chubb's Hotel, Old Town-street, Plymouth, on Tuesday, the 13th day of January inst., at Four o'clock P.M., ONE HUNDRED (6145ths) PARTS or SHARES in the EAST JANE MINE, situate in the parish of CARDINHAM, in the county of CORNWALL.

The shares are offered for sale in consequence of the non-fulfilment of a contract by Mr. T. J. Hewlit, of Plymouth, and will be sold without reserve, in one or more lots, as may be determined at the time of sale.—Wadeland, Liskeard, January 5, 1863.

MONMOUTHSHIRE.

TROED RHIW GWAIR ESTATE, in the parish of BEDWELLY, close to the Sirhowy Railway, and within 1¼ mile of the Tredegar Ironworks.

MR. PARTRIDGE WILL SELL, BY AUCTION, at the Westgate Hotel, in the town of Newport, on Wednesday, the 28th of January, at Half-past Two punctually,

All that most DESIRABLE ESTATE, called TROED RHIW GWAIR, comprising a substantial FARM HOUSE, with FARM OUTBUILDINGS, and 116A. 0R. 37P. of arable, pasture, and woodland, situate in the parish of Bedwelly, and Manor of Abercarne, in the county of Monmouth, all lying within a ring fence, and well supplied with water, adjoining the property of the Right Hon. Lord Tredegar, the Right Hon. Lord Llanover, and the Tredegar Iron Company; 63A. 0R. 27P. of the land are in the occupation of Mr. ISAAC MASON, as yearly tenant, and 53A. 0R. 10P. are under woods, and are in hand.

Valuable and extensive rights of common belong to the estate on the common adjoining to it, and on one of the commons on the south side of the Bedwelly Mountain.

The VALUABLE MINERALS under the Troed Rhiw Gwair estate, and under about 14 acres of land immediately adjoining it, will be sold with the estate.

These minerals are supposed to be the same as those under the adjoining property of the Tredegar Iron Company, which are now being worked by the company's new pits, sunk at a distance of about 200 yards from the western boundary of the estate. In addition to these minerals, the VEIN of COAL known as the PONT GWAITH YR HAIARN, or GWMHLERI VEIN, has been proved by a level at the south-western extremity of the property, and probably extends under the whole or the greater part of the estate.

The aggregate thickness of the strata of minerals proved in the neighbourhood of the property, besides the Cwmhleri vein of coal, amounts to about 28 ft. of coal, and about 6 ft. of iron ore.

Particulars, with lithographed plans, may be obtained on application at the office of the auctioneer, Newport; of Messrs. THOMAS WHITE and SONS, 11, Bedford-row, London, W.C.; or of Messrs. BLOUNT and DAVIS, solicitors, Usk.

SALE of the VALUABLE STEAM ENGINES, PLANT, UTENSILS, and EFFECTS at the HAYWOOD COLLIERY, TIMSBURY,

Twelve miles from Bristol, nine miles from Bath, and within a short distance of the Somerset Coal Canal.

MESSRS. FARGUS WILL SELL, BY AUCTION, on the premises, on Wednesday, the 4th day of February, 1863, the costly and VALUABLE STEAM ENGINES, PLANT, and UTENSILS at the HAYWOOD COLLIERY, TIMSBURY, SOMERSETSHIRE, including—

A very fine 90 horse power PUMPING ENGINE, with 60 in. cylinder, massive beam, shear legs, and supports.

A capital 19 horse power CONDENSING and WINDING ENGINE, 6 ft. stroke, with beam, steam pipes, &c.

THREE WROUGHT-IRON globular BOILERS, 15 ft. diameter.

A 14 ft. fly-wheel, a 10 ft. spur wheel and nut, two wire pit ropes, 180 fms. each; several hundred fathoms of iron pipes, of various diameter; large, nearly new, four-motion crab; several hundred tons of wrought and cast-iron rails, chains of various sizes, pulley wheels, blacksmiths' tools, wrought and cast-iron, weighbridge to weigh 10 tons, small weighing machines, 20 underground puts, wagons, coal hodges, about 300 tons of fire-clay, and many other valuable articles.

The sale will commence at Twelve o'clock. The machinery may be viewed by application on the premises, and catalogues can be had of Mr. TALLIS, Timsbury Collieries, Bath; or of Messrs. FARGUS, 4, Clare-street, Bristol.

TO MINE CAPITALISTS—VALUABLE OPPORTUNITY.

MESSRS. OLVER AND SONS are favoured with instructions to SELL BY AUCTION, on Thursday, the 12th day of February next, at noon, at the counting-house, on the mine, the whole of that well-known and VALUABLE MINE, known as WHEAL LOVELL, situate in the parish of WENDRON, in the county of CORNWALL.

The mine will be offered in one lot, including the whole of the ENGINES, PLANT, MACHINERY, and MATERIALS, as the same are now at work, including—

A 50 in. cylinder PUMPING ENGINE, with the THREE BOILERS.
A 24 in. STAMPING ENGINE, for 24 heads.
14½ in. steam whim, 200 fms. of pitwork of various sizes. Also, the whole of the tin leavings and slimes.

Lithograph plans of the mine are in preparation, and will be ready in a few days, which may be had, together with printed reports of the present condition and prospects of the mine recently made by competent inspectors, from which it will be seen this auction offers a valuable opportunity to mine adventurers of making more than ordinary return for their capital.

Application for plans and reports to be made to Capt. PHILLIPS, Wheal Lovell Mine, Falmouth: to the Auctioneers, Green Bank, Falmouth; or to Messrs. CARLYON and PAUL, solicitors, Truro.—Dated December 29, 1862.

TO BE SOLD, BY PRIVATE CONTRACT, at TAVY CONSOLS MINE, near TAVISTOCK, the whole of the PLANT and MATERIALS therein, with power of removal, viz.:—

ONE WATER WHEEL, 40 ft. high, and 4½ ft. wide.
ONE WATER WHEEL, 30 ft. high, and 3 ft. wide.
ONE WATER WHEEL, 14 ft. high, and 1 ft. 5 in. wide.
ONE WATER WHEEL, 9 ft. high, and 10 in. wide.

1 balance bob.	capstan and shears.
90 fms. 3 in. iron rods and pullies.	80 fms. 6 in. pipe.
1 angle bob.	120 fms. ⅝ in. chain.
1 shaft bob.	11 machine kibbles.
10 fms. 6 in. drawing lift.	poppet head and pullies.
24 fms. 7 in. plunger lift.	about 400 fms. railway iron.
32 fms. 10 in. ditto.	5 iron tram wagons.
24 fms. 10 in ditto, 11 in. pole.	100 fms. launders.
8 spare pumps.	8 head stamps, iron axle.
90 fms. af wood rods, in shaft.	1 crusher.
90 fms. launders.	1 drawing maching.

Screw stocks, anvil, vice, taps and plates, smiths' and miners' tools; about 5 cwts. of gad and borer steel; a lifting jack; several tons of new and old iron, &c.

All offers to be made to Capt. JOSEPH RICHARDS, Lamerton, near Tavistock.

For viewing the materials, apply to Capt. Goss, on the Mine.

KIRKCUDBRIGHTSHIRE.

GRANITE QUARRY TO LET, on the ESTATE of KIRKCONNELL, situate about 400 yards from the mouth of the River Nith, where there is excellent shipping accommodation. The quarry is as yet only partially opened, but the stone, which is of excellent quality, can, from the sloping position of the ground towards the river, be easily shipped by means of a tramway, without carting. Freights very low to Liverpool, Glasgow, and Belfast, where there is a great demand for granite.

Written offers will be received, till 1st of MARCH, by Mr. NORVAL, Inspector of the Nith Navigation Works, Glencaple, Dumfries, who will give all particulars, and show the quarry, which is well worth the attention of persons or a company with capital, as the facilities for getting out the granite are very great.

TO LET, on liberal terms, a VALUABLE LEAD MINE in SOUTH WALES, with 50 feet WATER WHEEL, CRUSHER, and OTHER MACHINERY.—Apply to Mr. PRATT, Crickhowell.

IRONSTONE.—A ROYALTY TO LET in NORTH YORKSHIRE UNDER THREE HUNDRED ACRES of LAND. The top seam is 12 feet in thickness, and is of the same description as now working at the celebrated Rosedale Mines, whilst the property contains both the Pecton Band, of about 4 feet, and the Avicula ditto, of about 4 ft., of the same quality as now worked at Grosmont. It is most admirably situated on the North Yorkshire and Cleveland Railway, and could either be smelted on the spot or sent to furnaces in this district.—Applications to be made to S. INGLEDEW, Wharfinger, Stockton-on-Tees.

GLASGOW CORPORATION WATER-WORKS—PUMPING ENGINES FOR SALE.—The Glasgow Corporation Water Commissioners are PREPARED to SELL TWO POWERFUL PUMPING ENGINES, used up to March, 1860, in supplying the city with water, and still in good working order. One of these engines, when at work, raised 230,000 gallons per hour to a height of 90 feet, and the other 130,000 gallons per hour to a height of 195 feet.

For further particulars, apply to Mr. GALE, engineer, Water-Works Offices, 23, Miller-street, Glasgow; or to JOHN BURNET, secretary.

PUMPING ENGINE ON SALE, 60 in. cylinder, 10 ft. stroke, a most superior engine, by Harvey and Co., Hayle; also, THREE BOILERS for the same, with all fittings and connections, the whole of the most modern construction, and nearly new; this engine is a perfect model of strength and elegance of structure. Also, ONE 48 in. ENGINE, 8 ft. stroke, and about 100 yards of 24 in. PUMPS, with working barrels, windbore, &c., and several HIGH and LOW PRESSURE WINDING ENGINES, EGG-ENDED and CORNISH BOILERS, &c.—J. F. FORSTER, Queen's Chambers, Market-street, Manchester.

FOR SALE, a 24 in. cylinder PUMPING ENGINE, 9 ft. stroke by 7 ft., with BOILER 8 tons, and fittings complete. Also, a 24 in. cylinder WINDING and STAMPING ENGINE, with pumping beam attached, BOILER 10½ tons, and fittings complete, stamps axle for 16 heads, &c. The above are in good working condition, and within a short distance of a shipping port and railway.—Apply to Mr. THOMAS W. FIELD, Marazion, Cornwall.

NEW AND SECOND HAND HIGH PRESSURE STEAM ENGINES FOR SALE.—A PAIR of 15 in. SECOND HAND HORIZONTAL ENGINES, 15 in. stroke, adapted for pumping or winding, or both, with boiler, nearly new, 4 ft. diameter, 24 ft. long, weighing 3 tons.

A NEW HORIZONTAL ENGINE, 16 horse power, cylinder 14 in. diameter, and 2 ft. 6 in. stroke, with link mechanism for reversing.

A MODEL COLUMN ENGINE, quite new, having a cylinder of 3½ in. diameter, and 6 in. stroke, was made to drive a pair of centrifugal pumps. Vertical boiler and chimney.—Apply to J. MAYBERY and SONS, Engineers and Ironfounders, South Wales Foundry, Llanelly.

IRON TESTING MACHINES.—ROBINSON AND COTTAM, MAKERS of CHAIN and IRON TESTING MACHINES to the ADMIRALTY, make a PORTABLE MACHINE for TESTING IRON up to 1½ in sectional area. It occupies but little space, and can stand in an office. Price, £110.—Apply at the works, Lower Belgrave-place, Pimlico, S.W.; or at the offices, 7, Parliament-street, London, S.W.

TO SULPHURIC ACID MANUFACTURERS.—SULPHATE OF LEAD and LEAD ASHES PURCHASED.—Address samples, Bedminster melting Works, Bristol.

SALE OF BASTIER'S CHAIN PUMP PATENT.—Mr. J. U. BASTIER is DESIROUS of FINDING a PARTNER for CONTINUING the DEVELOPMENT of his ENGLISH PATENT for his CHAIN PUMP, or he is WILLING to SELL the ENTIRE or PART of HIS INTEREST therein. He proposes to grant four exclusive licenses for the full term of the patent, for England, Scotland, Ireland, and Wales respectively:—

For the license for England, he demands the sum of £2000 for the unreserved transfer, or £1000 if 25 per cent. of the nett profits be secured to him.

For the license for Scotland, he demands £1500 for unreserved sale, or £750 with 25 per cent. of profits.

For the license for Ireland, he demands £1400 for unreserved sale, or £700 with 25 per cent. of profits.

And for the license for Wales, he demands £1200 for unreserved sale, or £600 with 25 per cent. of profits.

Address, J. U. BASTIER, C.E., 47, Warren-street, Fitzroy-square, London.

TO SHIPPERS AND DEALERS IN COALS.

THE INCE HALL COAL AND CANNEL COMPANY beg to inform shippers and dealers that, on the retirement of Messrs. W. and H. Laird as their sole agents for the sale of their coals and cannel in Liverpool, they are now PREPARED to SUPPLY COALS, CANNEL, COKE, and SLACK DIRECT from their MINES.

All applications or orders addressed to the company's offices, 40, Exchange-alley, Old-[illegible]reet, Liverpool, or to the works, Wigan, will receive prompt attention.

GEORGE GILROY, Manager.

Ince Hall Coal and Cannel Works, Wigan, November 1, 1862.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET

NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

THE BOTTOMS OF IRON SHIPS PRESERVED FROM CORROSION, AND PROTECTED FROM FOULING, DURING A VOYAGE ROUND THE WORLD.

MESSRS. PEACOCK AND BUCHAN beg to CALL the ATTENTION of IRON SHIPOWNERS to their IMPROVED No. 2 COMPOSITION for the BOTTOMS of IRON SHIPS. It contains NO COPPER in ANY SHAPE, and thus PREVENTS the DESTRUCTION of the RIVETS and HONEY-COMBING of the PLATES, besides KEEPING CLEAN as LONG, or LONGER, than preparations which contain copper, whilst it is CHEAPER, and MORE EASILY APPLIED. It is in use on the iron fleets of the Peninsular and Oriental Company, the Royal West India Mail Company, and many other great shipping companies, and has been tested by the Lords Commissioners of the Admiralty, for a series of years, on the iron troop-ship *Himalaya*, and other iron ships of war, in competition with rival compositions.

The paddle wheel steam-vessel, *Triton*, 6, at Devonport, having been thoroughly repaired, rigged, and stored, is now nearly ready for the first division of the steam reserve. This is the ship the iron plates of which were reduced to the thickness of paper by galvanic action, induced by the vessel having been coated with a preparation of copper. She is now covered outside with the composition of Messrs. Peacock and Buchan.—*Times*, December 22, 1862.

Apply to Messrs. PEACOCK and BUCHAN direct, Southampton.

CREASE'S PATENT EXCAVATING MACHINERY, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C.

By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

BRENTON SYMONS, MINING ENGINEER, SURVEYOR, AND DRAUGHTSMAN,
18, HATTON GARDEN, E.C., and at TRURO, CORNWALL.

REDUCED COPY of almost ANY MINE in CORNWALL forwarded at a cost not exceeding 21s. INTENDED MINING PUBLICATIONS ARRANGED for the press. PROSPECTUSES of MINES, &c., PREPARED and LITHOGRAPHED. WORKING PLANS and SECTIONS of MINES KEPT FORWARD, at monthly charges varying from 10s. 6d. to 63s. SURVEYS of ESTATES MADE, REDUCED COPIES LITHOGRAPHED and bound up for convenient reference. PLANS and SECTIONS of RAILWAYS and MINES, ARCHITECTURAL and MECHANICAL DRAWINGS, VIEWS, &c., LITHOGRAPHED.

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Now ready, roan tuck, gilt edges, price 5s. (postage 4d.),

THE ENGINEER'S, ARCHITECT'S, AND CONTRACTOR'S POCKET-BOOK
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THE PRACTICAL MECHANICS' JOURNAL (SCIENTIFIC) RECORD OF THE EXHIBITION, 1862. A full and elaborate account of the Exhibition, divided into 50 sections, and contributed by 42 writers of high scientific attainments. Amongst the contributors are Prof. John Wilson (Edinburgh), Warington Smyth, Robert Hunt, Dr. Voelcker, P. L. Simmonds, E. J. Reid, G. R. Burnel, Robert Mallet, J. F. Bateman, J. E. M'Connel, Macquorn Rankine, G. R. Rennie, Bridges Adams, Dr. Frankland, R. W. Binns (Worcester), Dr. Angus Smith, Dr. Richardson (Newcastle), F. A. Abel, Dr. Robinson (Armagh), Rev. Prof. Haughton, Prof. J. C. Maxwell, C. W. Siemens, Dr. Rimbault, Sir Henry James, R.E., Dr. Diamond, Dr. Odling, and Dr. David S. Price.

London: Longman and Co., Ludgate-hill: Proprietor's Offices (Offices for Patents), 147, Lincoln's Inn-fields, W.C.

THE MINING REVIEW, AND JOURNAL OF COMMERCE, TRADE AND MANUFACTURE, SCIENCE AND THE ARTS.
Wednesday, March 26, 1862. Subscription, £1 1s. annually. Price 6d. stamped.

RAILWAYS AND MINES,
Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access giving special attention to the subject. Mines afford a wider range for profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £15 to £25 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to railways and mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.

MESSRS. TREDINNICK AND CO., STOCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C.

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WHITE STAR LINE OF EX-ROYAL MAIL CLIPPERS,
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The clippers of this line are noted for their superior accommodation, punctuality of sailing, and rapid passages.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or H. T. WILSON, COOKE, and Co., 27, Leadenhall-street, London; or to GRINDLAY and Co., 55, Parliament-street, and 124, Bishopsgate-street, London.

TO CAPITALISTS.—MESSRS. LEICESTER AND CO., INSPECTORS and VALUERS of MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES to SELECT and INVEST CAPITAL in MINING PROPERTIES, for which they charge 2½ per cent.; and they also COLLECT and TRANSMIT the DIVIDENDS, charging £5 per cent. on their amount. Messrs. LEICESTER and Co. earnestly call the attention of capitalists to the many opportunities they possess of investing, to pay from £50 to £150 per cent. per annum. Sums under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London; or direct through our bankers, the Union Bank of Australia.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
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The best medium for mining, manufacturing, shipping, and trading advertisements in the North of England.
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NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

MR. WHEATLEY KIRK (principal of the firm of Wheatley Kirk and Co., engineers, contractors, &c.) ARCHIMEDEAN WORKS, ALBERT STREET, ST. MARY'S, MANCHESTER, continues, after upwards of 20 years' experience, personally to attend to VALUATIONS, ARBITRATIONS, or SALES BY PRIVATE CONTRACT or PUBLIC AUCTION, of EVERY DESCRIPTION of PROPERTY appertaining to ENGINEERING, MACHINERY or PLANT in ENGINEERING ESTABLISHMENTS, MILLS, FACTORIES, WORKS, &c., with the LANDS, ESTATES, and BUILDINGS belonging thereto; also in RAILWAYS, MINES, &c.—Albert-street, St. Mary's, September, 1862.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.,
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

RAILWAY WAGONS.—WILLIAM HARRISON AND CAMM HAVE ON HAND RAILWAY, COAL, COKE, AND MINERAL WAGONS ON SALE OR HIRE,
AT THE ROTHERHAM WAGON WORKS, MASBRO'.

RAILWAY WAGONS.—J. H. SALES AND CO.,
WEST RIDING WORKS, SHEFFIELD.
RAILWAY WAGONS on SALE. RAILWAY WAGONS on HIRE.
RAILWAY WAGONS on SALE on PURCHASE LEASES.
For terms, apply as above, where sample wagons may be inspected. Material and workmanship guaranteed.

RAILWAY CARRIAGE COMPANY (LIMITED),
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.

RAILWAY STONE AND COAL WAGONS TO BE LET.
Apply to Messrs. W. L. and T. UNDERHILL, Tipton.

NORTH CENTRAL WAGON COMPANY, ROTHERHAM.
RAILWAY WAGONS TO BE SOLD OR LET.
Application to be made to Mr. BARRAS, secretary, North Central Wagon Company, Rotherham.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS
RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham.

JOHN PICKERING AND CO., RAILWAY WAGON AND CARRIAGE BUILDERS.
WAGONS FOR SALE, HIRE, OR ON PURCHASE LEASE.
BRINSWORTH WAGON WORKS, ROTHERHAM.

GENERAL ROLLING STOCK COMPANY (LIMITED).
With which is united the Rolling Stock Company of Ireland (Limited).
OFFICES,—92, CANNON STREET, E.C.
LONDON WORKS,—RAILWAY WORKS, GOSWELL STREET.
DUBLIN WORKS,—SEVILLE WORKS, DUBLIN.

The Directors beg to announce that the BUSINESS of the company has been REMOVED to the PERMANENT OFFICES, 92, CANNON STREET, E.C., and that they are now PREPARED to RECEIVE PROPOSALS for WORKING on LEASE COMPLETED LINES of RAILWAY at FIXED RATES.

They are also PREPARED to SUPPLY, either by way of lease, hiring, or sale, EVERY DESCRIPTION of ROLLING STOCK, ENGINES, CARRIAGES, WAGONS, &c. The company has on hand a large number of first-class wagons, constructed either for goods or coal. Terms can be had on application at the offices, addressed to
J. HOWARD RUSSEL, Sec.

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. MCCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

WILLIAM J. SMITH, ENGINEER AND CONTRACTOR,
BELMONT, near DURHAM, UNDERTAKES the SINKING of PITS, also the SUPPLYING, ERECTING, REMOVING, and COMPLETION of EVERY DESCRIPTION of COLLIERY and MINING WORK.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 25 to 50 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED for MINING PURPOSES. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.
Copper wire covered with silk, cotton, or any other material, to order.

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID,
FOR REMOVING AND PREVENTING
INCRUSTATION IN STEAM BOILERS, LAND AND MARINE.
P. S. EASTON AND G. SPRINGFIELD,
Patentees and Sole Manufacturers,
37, 38, and 39, WAPPING WALL, LONDON, E.,
Or of their Agents in the principal towns of Great Britain and the Colonies.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

GEO. SPILL & CO.'S IMPROVED MACHINERY BELTING,
WARRANTED NOT AFFECTED BY HEAT, WATER, OR GREASE, AND ARE MADE TO ANY LENGTH IN ONE PIECE.
PRICES PER FOOT RUN.

Inches wide.	1	1½	2	2½	3	3½	4	4½	5
No. 1 substance.	0 3	0 4	0 6	0 7½	0 9	0 10½	1 0	1 1½	1 3
No. 2 substance.	—	—	—	—	1 3	1 4½	1 6	1 7½	1 9
No. 3 substance.	—	—	—	—	—	—	1 9	1 10½	2 0

Inches wide.	5½	6	7	8	9	10	11	12
No. 2 substance.	1 10½	2 0	2 3	2 6	2 9	3 0	—	—
No. 3 substance.	2 3	2 6	3 0	3 6	4 0	4 6	5 0	5 6

This Belting (unlike the ordinary manufactures) is woven into one solid substance from the best flax yarn, and are saturated with a compound to consolidate them, which is not liable to decomposition. They possess extraordinary strength, as the following certificate will verify, which renders them particularly adapted for paper and saw mills, threshing machines, grain elevators, foundries, machine shops, &c.

COPY OF CERTIFICATE, FROM THE PORT OF LONDON CHAIN CABLE PROOF HOUSE.
THIS IS TO CERTIFY, that the tensile strength of Machinery Belting, manufactured by GEO. SPILL AND CO., of HACKNEY WICK, LONDON, as proved by my chain cable testing machine, at Rotherhithe, to be as follows, viz.:—

Substance.	Breaking strain.
No. 1	5 in. wide .. 6,272 lbs., or, for every inch of width, 1254 lbs.
No. 2	5 in. wide .. 7,448 lbs., or, for every inch of width, 1489 lbs.
No. 3	10 in. wide .. 16,632 lbs., or, for every inch of width, 1663 lbs.
A stout leather band	4 in. wide .. 2,100 lbs., or, for every inch of width, 525 lbs.

July 9, 1862. (Signed) WM. MITCHESON.

Manufacturers of India rubber. Double texture and oiled waterproof cart, rick, and wagon sheets, made up ready for use, price at per square yard. Farmers' gaiters, buskins, and farm labourers' waterproof garments.
WORKS, HACKNEY WICK, N.E.;
DEPOT, 149, CHEAPSIDE, E.C., LONDON, AND 9, HIGH STREET, BRISTOL.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,
MANUFACTURED by GEORGE LOW,
MILLGATE IRONWORKS, NEWARK-UPON-TRENT,
Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.

The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

G. LOW begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

MANUFACTURER of WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.

IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

G. LOW begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also,
MANUFACTURER of IMPROVED BORING MACHINES for DRIVING ADITS.

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE.

International Exhibition, Class 8 and 9—Prize Medals.

CLAYTON, SHUTTLEWORTH, AND CO have been AWARDED PRIZE MEDALS for the "good arrangement, good workmanship, and practical success" of their steam-engine in Class 8, and "for their steam-engines and threshing machines" in Class 9.
CLAYTON, SHUTTLEWORTH, and Co., Agricultural and General Engineers, Lincoln, and 78, Lombard-street, London.

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S.

International Exhibition, 1862—Class 1.

Catalogue, No. 199. { JURY AWARD of HONOURABLE MENTION, given to Ellis Lever, "for convenience and efficiency" in ventilating mines, "especially in cases of emergency," with brattice, door-cloth, and flexible tubing, as exhibited and manufactured by him.

ELLIS LEVER, WEST GORTON WORKS, MANCHESTER, begs respectfully to inform all owners and managers of collieries, ironstone, lead, or copper mines, that he is PREPARED to SUPPLY the FLEXIBLE TUBING, in any lengths, and from 6 in. to 24 in. diameter. BRATTICE and DOOR-CLOTH in any width or length, AIR-PROOF, FIRE-PROOF, or WATER-PROOF. A large stock of every width constantly ready for immediate dispatch to any part.
ELLIS LEVER, MANCHESTER.

BARCLAY'S PATENT STEAM AND WATER PRESSURE AND VACUUM GAUGES.

These GAUGES are MADE to INDICATE ANY PRESSURE from ONE to TWENTY THOUSAND POUNDS upon the SQUARE INCH.
EACH GAUGE is GUARANTEED FOR FIVE YEARS.

PATENTEE AND MAKER,
ANDREW BARCLAY,
ENGINEER,
KILMARNOCK.

PUBLIC TEST OF WIRE-ROPE.—The SUPERIOR QUALITY of GARNOCK, BIBBY, AND CO.'S WIRE-ROPE was FULLY PROVED by a RIVAL MANUFACTURER at the LIVERPOOL PUBLIC TESTING MACHINE, on the 29th of October, 1860, on which occasion GARNOCK, BIBBY, and Co.'s ropes were found to be the STRONGEST of all the TWELVE SAMPLES from different makers then tested, as reported in the papers of the day. For example:—

(Certified by Mr. William Macdonald, superintendent.)

Sizes.	Garnock, Bibby, and Co. Tons	c.	Corresponding sizes from other manufacturers. Tons	c.
3½ in.	18	5*	16 10	11 10
2½ in.	8	15*	7 15	5 0

Remaining sizes with similar results.
* Samples taken promiscuously from stock by a rival manufacturer's agent.
GARNOCK, BIBBY, AND CO.,
SWAN HEMP AND WIRE ROPE MANUFACTURERS,
LIVERPOOL.
FLAT and ROUND STEEL and IRON WIRE ROPES for MINES, &c., of SUPERIOR QUALITY.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

BASTIER'S PATENT CHAIN PUMP,
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, armers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION,
OFFICES, 47, WARREN STREET, FITZROY SQUARE.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER, C.E.

ASSAYS AND ANALYSES OF EVERY DESCRIPTION
Conducted by JOHN MITCHELL, F.C.S., M.G.A. (late Mitchell and Rickard)
Author of "Manual of Practical Assaying," "Metallurgical Papers," &c.
All communications and samples to be addressed (free) to Mr. MITCHELL, care of Mr. P. Clay, 29, Great St. Helen's, London, E.C.

TO INVENTORS.—All INTENDING PATENTEES should PROCURE the PRINTED INFORMATION regarding PATENTS, their COST and the MODE of PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL PATENT COMPANY (LIMITED), 71, FLEET STREET, LONDON.
R. MARSDEN LATHAM, Sec.

WASTE NO OIL.

STRONG IRON OIL CISTERNS
NOT LIABLE TO LEAK, and ECONOMISE SPACE in the STORES:—

	Dia.	Height.				Dia.	Height.	
500 gallons	48	× 84	£10	10 0	75 gallons	27	× 42	£ 2 15 0
400 „	43	× 83	9	9 0	50 „	24	× 36	2 15 0
300 „	37	× 84	7	7 0	40 „	21	× 38	2 5 0
252 „	35	× 79	6	10 0	30 „	21	× 30	1 15 0
200 „	33	× 72	6	0 0	25 „	19	× 30	1 5 0
150 „	30	× 66	5	5 0	20 „	19	× 26	1 2 0
100 „	27	× 55	4	10 0	10 „	15	× 21	0 15 0

STRONG IRON BUCKETS:—
2½ gallons..... 4s. 6d. | 3½ gallons..... 5s. 6d.
3 „ ..... 5 0 | 4 „ 6 0

WAGON GREASE, £12 to £16 per ton, in 4 and 8 cwt. casks.
TURPENTINE SUBSTITUTE, 3s. per gallon, in 30-gallon casks.

TO IRON AND COAL MASTERS, &c.

IMPROVED BLACK VARNISH,
FOR PREVENTING IRON FROM RUST, AND WOOD FROM DECAY.
A brilliant jet black, superior to paint in appearance, dries in less time, contains preservative qualities of the best description, and is economical in its use: one gallon at 1s. is equal to 14 lbs. of paint, which costs 4s.
For COLLIERY HEAD GEARING, RAILWAY WAGONS, BOILERS, CASTINGS, CANAL BOATS, &c., it is especially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.
GLOVER AND CO.,
No. 40, MANESTY LANE, LIVERPOOL.

LITHOGRAPHIC PLAN DRAWING AND PRINTING.—ANDREW REID, LITHOGRAPHIC PLAN DRAUGHTSMAN, continues to EXECUTE, in a superior manner, with dispatch, and on moderate terms, EVERY DESCRIPTION of MAP and PLAN WORK.
Having for several years given his attention to plan work, printed in colours, he respectfully refers his friends and the public generally to the numerous plates illustrating the volumes of the North of England Institute of Mining Engineers' Transactions, also to the late Mr. Bewick's work on Cleveland Ironstone, as specimens of good colour printing.
40 and 65, Pilgrim-street, and 24, Shakespere-street, Newcastle-upon-Tyne.

KEATING'S COUGH LOZENGES are daily recommended by the faculty (testimonials from the most eminent of whom may be inspected) as the most effectual, safe, speedy, and convenient remedy for coughs, and all disorders of the chest, lungs, and throat.—Sold in boxes, 1s. 1½d.; tins, 2s. 9d., 4s. 6d., and 11s. each.—THOMAS KEATING, pharmaceutical chemist, 79, St. Paul's Churchyard, London. Sold retail by all druggists, &c.

DR. SMITH has just published a free edition of his valuable work, the PRIVATE MEDICAL FRIEND (116 pages), on the Self Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the errors of youth. Sent post free to any address, on receipt of a directed envelope, enclosing two postage stamps.—Address, Dr. SMITH, 8, Burton-crescent, Tavistock-square, London W.C.

THE MINING SHARE LIST

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
1000	Alderley Edge (Cheshire) [L.]*	10 0 0	—		7 18 6	0 10 0	May, 1862
4000	Bedford United (copper), Tavistock†	2 6 8	—		13 0 0	0 2 6	Dec. 1862
240	Boscean (tin), St. Just†	20 10 0	—		36 10 0	1 0 0	Mar. 1862
200	Botallack (tin, copper), St. Just	91 5 0	—		455 15 0	6 0 0	Nov. 1862
916	Cargoll (silver-lead), Newlyn	15 5 7	42	41 43	1 0 0	1 0 0	Nov. 1862
1000	Carn Brea (copper, tin), Illogan†	15 0 0	—	60 65	273 10 0	2 0 0	Feb. 1862
256	Copper Hill (copper) Redruth	48 0 0	—	60 65	9 10 0	2 10 0	Sept. 1862
12000	Copper Miners of England	25 0 0	—		7¼ per cent.		Half-yrly.
350000	Ditto ditto (stock)	100 0 0	—		1 per cent.		Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0	—		7 12 0	0 4 0	July, 1862
512	Creegbrawse and Penkevil, St. Colomb	—	—		0 10 0	0 10 0	Jan. 1862
367	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		7 13 0	0 5 0	July, 1862
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		247 10 0	4 0 0	Sept. 1862
280	Derwent Mines (sil.-lead), Durham	300 0 0	—		147 0 0	5 0 0	June, 1862
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	—	500 510	826 0 0	10 0 0	Nov. 1862
358	Dolcoath (copper, tin), Camborne*	128 17 6	605		693 10 0	7 0 0	Dec. 1862
3006	Dyfngwm (lead), Wales	12 6 6	—	10¼	0 15 0	2 6	Sept. 1862
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	56	54 56	105 0 0	0 0	Nov. 1862
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	45	45⅛ 46 xd.	5 17 6	1 0 0	Jan. 1863
300	East Darren (lead), Cardiganshire*	32 0 0	—		84 10 0	1 0 0	Oct. 1862
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		320 0 0	5 0 0	Dec. 1862
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		—	—	July, 1862
6000	Frank Mills (lead), Devon	3 18 6	—	1⅛	0 16 0	0 2 0	Mar. 1862
1798	Great Wheal Fortune (tin), Breage	18 6 0	31	31 33	3 0 0	0 10 0	Oct. 1862
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	—		2 2 6	0 5 0	Sept. 1862
10240	Gunnis Lake (Clitters' Adit)	0 2 0	—		0 3 0	0 1 6	Mar. 1862
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	51	48 50	21 10 0	1 15 0	Oct. 1862
1000	Hibernian Mine Company	92 6 2	—		9 0 0	0 15 0	Sept. 1862
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—		399 10 0	4 0 0	Nov. 1862
9000	Marke Valley (copper), Caradon	4 10 6	8¾	8¼ 8⅛	2 6 6	0 2 6	Jan. 1863
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—		99 18 0	7 0 0	Nov. 1862
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1	0 7 6	Aug. 1862
5936	North Treskerby (copper), St. Agnes	1 9 0	4½	4 4¼	0 3 0	0 1 6	Dec. 1862
5000	Oreedd (lead), Flintshire	0 0 8	—		0 10 4	0 0 8	Mar. 1862
640	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—	5 6	36 16 6	0 7 0	Nov. 1862
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		47 10 0	10 0 0	Oct. 1862
400	Phœnix (copper and tin)	—	—		—	—	—
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	42	41 42	66 5 0	1 5 0	Nov. 1862
6000	Rosewall Hill and Ransom United	2 16 0	—	3⅜ 3⅝	0 8 6	0 2 6	Sept. 1862
4026	Rosewarne Consols (copper)	3 7 6	3⅛		0 2 0	0 2 0	Oct. 1862
16	Rhosesmor (lead)	50 0 0	—		1250 0 0	100 0 0	Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	395	390 400	391 0 0	5 0 0	Nov. 1862
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	45	45 47⅛	73 10 0	1 0 0	May, 1862
5000	South Exmouth (lead), Christow	1 0 0	5⅛	5 5¼	0 5 0	0 5 0	Dec. 1862
496	S. Wh. Frances (cop.), Illogan* [S.E.]	18 18 9	97½	90 95	365 5 0	1 0 0	Jan. 1863
500	South Woodley	—	—		—	0 6 0	June, 1862
280	Spearne Moor (tin, copper), St. Just	31 17 9	—		9 15 0	1 0 0	June, 1862
940	St. Ives Consols (tin), St. Ives†	8 0 0	—		485 10 0	0 10 0	Aug. 1862
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	13⅛	13¼ 14	11 18 6	0 5 0	Dec. 1862
1000	Trumpet Consols (tin), near Helston	11 10 0	—		11 0 0	2 0 0	Mar. 1862
4200	Vigra and Clogau (copper) [L. £5]	2 15 0	33	30 32	4 12 6	1 0 0	Oct. 1862
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	13 14	23 6 0	0 6 0	Sept. 1862
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0	27	28⅛ 30	101 1 3	0 10 0	Oct. 1862
6400	West Fowey Consols (tin and copper)	7 10 0	—		0 19 0	0 3 0	May, 1862
1024	West Penstruthal	4 0 0	—		2 19 6	2 19 6	May, 1862
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	290	285 295	368 0 0	5 0 0	Dec. 1862
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	80		591 10 0	2 0 0	Dec. 1862
1000	Wheal Basset and Grylls (tin)	7 0 0	18		—	1 0 0	Dec. 1862
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0	20	19 20	28 6 0	0 7 6	Dec. 1862
1024	Wheal Grylls (tin), Perranuthnoe	2 4 0	33	31 33	2 2 0	0 10 0	Sept. 1862
1024	Wheal Hearle (tin), St. Just	9 13 8	—		0 5 0	0 5 0	May, 1862
4800	Wh. Ludcott and Wrey (lead), St. Ive.	2 10 8	10	9 9¼	3 2 0	1 0 0	Dec. 1862
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6	42	41 42	75 5 0	1 0 0	Nov. 1862
100	Wheal Mary (tin), Lelant	36 2 6	—		284 5 0	4 0 0	Mar. 1862
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]†	8 0 0	16	15 16	56 17 6	0 10 0	Dec. 1862
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		310 13 0	7 10 0	Nov. 1862
128	Wheal Prosper (tin), Lanivet	3 0 0	—		—	4 10 0	June, 1862
396	Wheal Seton (tin, copper), Camborne.	58 10 0	230	235 245	144 15 0	3 0 0	Dec. 1862
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	—	17¼ 18¼	46 2 6	0 10 0	Nov. 1862

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
700	Aberdovey (silver-lead), Merioneth	1 10 0	—		0 10 9	0 10 0	Mar. 1859
4943	Alfred Consols (cop.), Phillack [S.E.]	3 15 11	—		20 3 0	0 2 6	April, 1859
200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0	—		9 0 0	4 0 0	April, 1861
256	Condurrow (cop., tin), Camborne	35 0 0	—		85 0 0	2 0 0	June, 1857
2450	Cook's Kitchen (copper), Illogan	17 0 9	33	32 33	1 7 0	0 7 0	May, 1862
4076	Devon and Cornwall (copper)	5 16 3	—		0 10 0	0 2 6	Feb. 1859
672	Ding Dong (tin), Gulval	40 18 6	—		16 7 6	1 10 0	Mar. 1857
12800	Drake Walls (tin, copper), Calstock	2 1 0	—		0 15 0	0 1 6	June, 1862
4940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3	0 2 6	June, 1860
6000	Great South Tolgus [S.E.], Redruth*	0 14 6	7⅛	7¼ 7⅛	7 18 6	0 5 0	Dec. 1861
119	Great Work (tin), Germoe	100 0 0	—		221 10 0	7 10 0	Feb. 1857
5000	Kelly Bray (lead, copper), Callington	4 15 6	⅞	¾ ⅞	0 6 0	0 2 0	Feb. 1860
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0	5 0 0	May, 1860
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	20¼	19⅝	14 7 11	0 7 0	Dec. 1861
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	—		0 3 6	0 1 0	Sept. 1861
470	Newtownards Mining Co., Co. Down	50 0 0	—		56 0 0	1 0 0	Sept. 1858
6000	North Downs (copper) Redruth	2 3 4	2⅜	2⅝ 2⅞	0 10 0	0 2 6	May, 1862
1772	Polberro (tin), St. Agnes	—	—		6 19 6	0 10 0	Dec. 1861
2000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 17 0	—	⅛ ⅝	0 10 0	0 2 6	July, 1857
6000	Tolvadden (copper), Marazion	0 15 2	3⅛	3⅛ 3⅛	0 13 6	0 3 0	Mar. 1860
9800	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0	—	¾ 1	5 6 0	0 2 6	Jan. 1861
572	Trelyon Consols (tin), St. Ives	12 0 0	16	14½ 15⅛	7 0 0	0 10 0	Sept. 1860
1024	Wendron Consols (tin), Wendron	11 13 10	11	10 11	8 15 0	1 0 0	Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
256	West Damsel (copper), Gwennap	38 10 0	—		45 0 0	1 0 0	May, 1860
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0	—	51 52⅛	929 0 0	2 0 0	Mar. 1861
128	Wheal Friendship (copper), Devon	50 0 0	—		2400 10 0	5 0 0	Feb. 1861
512	Wheal Jane (silver-lead), Kea	3 10 0	—		13 10 0	1 0 0	Mar. 1862
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	7¼	7¼ 8⅛	8 10 0	0 10 0	April, 1862
4295	Wheal Kitty (tin), St. Agnes	4 19 6	4⅛	3¾ 4	0 18 6	0 2 0	July, 1860
5000	Wicklow (copper) [L.], Wicklow	5 0 0	38¾	39¼	43 17 6	2 0 0	Oct. 1861

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
2464	Burra Burra (cop.), South Australia.	5 0 0	—		285 0 0	5 0 0	Oct. 1861
6000	Central American (silver) [L.]	5 0 0	—		2 2 9	0 14 6	Oct. 1862
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	21	20 22	98 12 0	1 0 0	Jan. 1862
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—	8 9	6 18 0	0 10 0	Nov. 1862
15000	East Indian Coal, Calcutta [L.]	10 0 0	—		7¼ per cent.		Yearly.
70000	English and Australian [S.E.]	5 0 0	—		1 7 6	0 2 6	Feb. 1862
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	—	4¼ 4½	0 2 6	0 2 6	May, 1862
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	—		19 5 0	1 0 0	June, 1862
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1⅜		0 10 0	0 1 0	June, 1862
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	—	7 8	8 16 2	0 5 0	Sept. 1862
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	—	1⅛ 2	0 19 9	0 1 0	Feb. 1862
08815	Mariquita and New Granada [S.E.]	1 0 0	—		0 9 6	0 1 6	July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅜	1¼ 1⅜	0 6 0	0 1 0	July, 1862
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	56	55 57	54 15 0	4 0 0	Dec. 1862
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	5⅛	5⅜ 5¾	2 1 6	0 5 0	Oct. 1862
20000	West Canada Mining Company [L.]	1 0 0	—		0 2 0	0 2 0	Nov. 1862

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	—		4 5 0	0 15 0	Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	—		15 per cent.		May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	—		1 0 0	1 0 0	June, 1855

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	—	1 1¼	Sept. 1858
20000	Beariz (tin) [L. £1]	0 10 0	—		Oct. 1862
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	1 0 0	—		
25000	Capula (silver), Mexico [L. £2] [S.E.]	0 10 0	—		Jan. 1862
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	—		July, 1862
10000	Copiapo Smelting [L.], Chili	10 0 0	—		Fully paid.
100000	Don Pedro North Del Rey (gold), Brazil [L. £1]	0 10 0	—		Aug. 1862
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	⅛	⅜ ⅝	Fully paid.
25000	East del Rey, Brazil [L. £3]	1 0 0	2⅞	1⅞ 2⅛	Sept. 1861
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 7 6	—		Mar. 1862
15000	Elbe Colliery Company [L.]	1 0 0	—		Fully paid.
30000	Ellerslie and Bardowie, Jamaica	0 18 0	—		Fully paid.
8000	English and Canadian Mining Company [L.]	5 0 0	—		July, 1859
40000	Fortune (copper), West Australia [L.]	2 0 0	—		Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—	⅝	June, 1862
24000	Hindostan (copper), Bengal [L. £5]	1 10 0	—	⅜ ⅝	May, 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0	—		June, 1860
10000	Karbitz Colliery Company [L.]	1 0 0	—		Fully paid.
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—		Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	—		Fully paid.
2000	New Burra Burra (Australia)	5 0 0	2⅛	2⅛ 2⅜	Fully paid.
60000	New Granada (gold), South America [S.E.]	1 0 0	—		Aug. 1862
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	—		Fully paid.
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 17 6	—		Nov. 1858
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—	⅜	
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 15 0	1⅜	1 1¼	Nov. 1862
17000	Quebrada (copper), Venezuela [L. £10]	1 10 0	—		April, 1862
60000	Santa Barbara (gold), Brazil [L. £1]	0 10 0	—		July, 1862
120000	Scottish Australian Mining Company [L. £1]	0 10 0	1	⅜ 1	Mar. 1862
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	1⅛	1¼ 1⅛	
50000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	—		May, 1860
12000	Teplitz Colliery Co. [L. £5]	2 0 0	—		Fully paid.
10000	Vancouver (coal) [L. £10]	5 0 0	—		
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 15s. pd., 25,000 £1 pd.]		—	4⅛ 5	
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		
12000	Wheal Ellen, South Australia [L.]	5 0 0	—		Oct. 1859
[illegible]	Wheal Jamaica (copper)	1 0 0	—		Fully paid.
[illegible]	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	3s. 5s.	Fully paid.
[illegible]	Yudanamutana (copper), South Australia [L.] [S.E.]	3 0 0	—	3¼ 3⅜	Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
600	Aberffrwd	0 10 0	—		
35000	Atlas Min. and Smelt. [L. £1]	0 10 0	—		Nov. 1862
6000	Bagtor [L. £2]	1 8 0	—		Oct. 1862
400	Baldwin, I. of Man [L. £5]	2 5 0	—	3¼	Jan. 1863
1624	Balleswidden (tin), St. Just	14 8 7	—		Mar. 1862
10000	Bampfylde (copper), Devon	1 0 0	—		Aug. 1860
30000	Barmouth Cons. (gold) [L. £1]	0 5 0	—		Aug. 1862
4000	Bedford Consols (copper)	2 5 0	—		Nov. 1862
2000	Berehaven (copper), Ireland	1 0 0	—		
200	Billins (lead) [L. £30]	25 0 0	—		Aug. 1862
1248	Boscaswell (tin, cop.), St. Just	6 15 0	—		Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	7 10 0	—		Sept. 1862
160	Bosorne & Bollowall, St. Just	6 5 0	—		Dec. 1860
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 6 0	—		Aug. 1862
6000	British (tin & cop.), [L. £1 10s.]	0 12 0	—		
4000	Brookwood (cop.) Ashburton	1 12 6	—	1⅛	
5000	Bronfloyd (ld.), Cardigan. [L.]	2 7 6	—		June, 1862
112	Bron-Haulog (ld.), Denbighsh.	20 0 0	—		No call.
5120	Brynambor (ld.), Cardi. [L. £5]	2 3 0	—		Nov. 1862
200	Brynford Hall (lead), Flint	25 0 0	—		April, 1862
500	Bryn Gwiog (lead), Flint	6 0 0	31	29 31	April, 1862
1960	Bryntail, Llanidloes, Montgo.	7 6 6	—		Oct. 1862
6380	Buller and Basset Unit. (cop.)	3 16 6	—		Sept. 1862
1200	Burra Burra (cop.), Kenwyn.	2 10 0	—		April, 1862
2200	Burren (lead, calamine) [L. £5]	5 0 0	—		June, 1862
915	Calvadnack, Wendron	22 17 0	7		Nov. 1862
1000	Camborne Consols (copper)	17 10 0	—		Oct. 1862
4600	Camborne Vean & Wh. Francis	8 14 4	—	1⅝ 1⅞	Oct. 1862
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	1⅜		Aug. 1862
914	Caradon Cons. (cop.), St. Cleer	25 9 6	—	13 14	Dec. 1862
4046	Caradon Hill (copper)	2 1 6	26	24 26	July, 1862
6000	Caradon United (copper)	0 10 0	—		Sept. 1862
10000	Cardigan Consols	—	—		July, 1862
2580	Carmarthen United	5 0 0	—		Fully paid.
6000	Carn Camborne (copper)	0 12 0	16s.	15s. 17s.	Dec. 1862
4370	Carnewas (ld., cop.), Mawgan	1 8 0	—		Nov. 1862
3000	Carn Vivian (tin, cop., lead).	2 1 6	—		Nov. 1861
2048	Carnyorth (tin), St. Just	4 0 0	—		Sept. 1862
20000	Carysfort [3200 £2⅛ pd., 16800 £1 pd.]		—		
10000	Castleward, Ireland [L.]	1 0 0	—		Fully paid.
2500	Cefn Cilcen (lead), Flintshire.	1 19 0	—		Nov. 1862
2500	Central Minera (lead) [L. £5]	1 19 0	1	⅞ 1	Oct. 1862
6000	Charlotte Untd., Perranuthnoe	2 19 7	—		Oct. 1862
4000	Clara Unit., Ponterwyd [L. £3]	1 12 0	—		July, 1862
787	Clijah & Wentworth (tin, cp.)	30 15 0	—		Dec. 1862
3285	Coed Mawr Pool (lead) [L.].	4 13 6	—		Mar. 1862
16000	Coolartra and Bond, Ireland	1 0 0	—		Sept. 1862
50000	Connorree (cop., sulph.) [L.]	1 0 0	23s.	1	Fully paid.
7000	Cornubia (tin)	2 0 0	—		Oct. 1862
861	Crane (copper), Camborne	15 10 0	—	8 9	Dec. 1862
30000	Craven Moor (ld.), Yorkshire.	0 10 0	—		No call.
12000	Crelake (cop.), Tavistock	—	—		No call.
8000	Crookhaven (cop.) [L. £2¼].	1 10 0	—		Oct. 1861
6000	Crowan Cons. (cop.) [L. £2].	0 15 0	—		Sept. 1862
2000	Crowlwm (lead), Llanidloes.	1 10 0	—		No call.
6000	Cuddra (cop., tin), St. Austell	3 8 0	—		Sept. 1862
1800	Cwmbrane, Carmar. [L. £3]	2 0 0	¾	3⅛ 3¼	Feb. 1862
30000	Dale, N. Staf. [L.] [21000 £1 pd., 9000 7s. 6d. pd.]				Sept. 1862
10000	Deborah United (ld.) [L. £1].	0 5 0	—		Sept. 1862
2000	Deep Level Minera [L. £5]	3 5 0	—		Feb. 1862
12000	Dev. New Copper Co. [L. £2]	—	—		
12000	Devon Union (copper) [L.]	1 0 0	—		Fully paid.
4566	Devon Wheal Buller (copper)	4 10 0	—		Aug. 1862
20000	Dolfrw-y-nog (gold) [L. £1].	0 10 0	¾	⅛ ¾	Sept. 1862
1000	Durlo (tin), Lelant	8 2 0	—		Oct. 1862
4000	Dulta (tin) [L. £1]	—	—		
4096	East Alfred Consols (copper).	6 0 11	—		Dec. 1862
3000	E. Beam (tin), St. Aus. [L. £2]	1 5 0	—		July, 1862
4096	East Brookwood (copper)	1 3 0	—	1¼	May, 1862
5000	E. Bronfloyd (sil.-ld.) Card. [L]	2 0 0	—		
6000	East Carn Brea (cop.) Redruth	3 11 0	11⅛	11⅜ 11⅝	Oct. 1861
2000	East Chiverton (lead)	—	5⅛	4⅛ 5	
50000	E. Clogau (gold), Merio. [L. £1]	0 5 0	⅛	⅜ ⅝	May, 1862
6400	East Crinnis and South Par	2 14 0	—		May, 1862
6000	East Damsel (cop.), Gwennap	1 11 0	—		Mar. 1862
4000	East Devon Gt. Consols (cop.)	1 6 6	—		Oct. 1862
2048	E. Falmouth (s.-ld.), Kenwyn	3 15 6	—		Nov. 1862
6000	E. Grenville (cop.), Camborne	1 9 6	51s.	49s. 51s.	Nov. 1862
4000	E. Gunnis Lake & S. Bedf. (cp.)	7 1 0	2		Dec. 1862
6145	East Jane (sil.-ld.), Cardinham	1 9 6	—	2⅛ 3⅛	Oct. 1862
1024	East Margaret	17 15 0	—		Oct. 1862
8000	E. Polberro, St. Agnes [L.]	0 10 0	—		May, 1861
4096	E. Providence (tin), Uny Lel.	2 10 4	—		Dec. 1862
5000	E. Rosewarne (cp., tin), Gwin.	2 15 0	2¾	2¾ 3	Sept. 1862
5610	East Seton (cop.), Camborne	0 7 0	—		Nov. 1862
256	East Tolgus (copper), Redruth	72 0 0	—		Oct. 1862
1000	E. Trefusis (cop.), Gwennap.	8 14 7	—		Aug. 1862
1024	E. Treskerby (cop.), Redruth.	6 5 0	—		Nov. 1862
1190	E. Wheal Agar (cop.), St. Cleer	9 12 0	—		July, 1862
4096	East Wheal Fortune	1 0 0	—	1⅜ 1⅛	Sept. 1862
2048	East Wheal Grylls (tin, cop.)	0 10 0	3⅛	3 3½	
2048	E. Wh. Lovell (tin), Wendron	2 13 6	—		
6000	East Wheal Neptune	0 10 0	—		
4000	E. Wh. Russell, Tavis. [S.E.]	7 19 0	3⅛	4 4¼	Nov. 1862
6000	Furze Hill Wood Cons., Buckl.	0 15 0	—		Sept. 1862
114	Garden (tin), Morvah	35 0 0	—		Feb. 1862
1000	Garreg (lead), Flint	5 4 0	—		Dec. 1862
4000	Gawton (copper), Tavistock	1 17 0	⅝	⅝	Oct. 1862
1024	Gelliffowler (ld.), Holywell.	0 2 6	—		June, 1861
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	5⅛	5 5⅛	
30000	Glasgow Caradon Cons. [L.].	1 0 0	—		Fully paid.
4892	Goginan (silv.-ld.) [1900 £12⅛, 2992 £1]		—		July, 1860
6144	Gonamena (copper), St. Cleer.	3 8 0	—	2⅜ 2⅝	Nov. 1862
2000	Goonzion (copper), St. Neot	0 9 0	—		Oct. 1862
486	Gramb. & St. Aub. (cp.) [S.E.]	54 0 0	17⅛	18 20	Dec. 1862
5000	Great Brigan (copper)	4 17 0	3⅜		Dec. 1862
4096	Great Caradon (cop.), St. Ive.	2 0 0	1⅛	1⅛	Dec. 1862
15000	Great Laxey (lead) [L. £4]	—	—		Fully paid.
6000	Great North Downs (copper)	2 0 0	—		Aug. 1862
30000	Great North Tolgus [L. £1]	0 7 6	2⅛		Nov. 1862
10104	Great Onslow Cons., Camelfd.	3 10 9	—		Dec. 1860
6000	Gt. Retallack (sil.-ld., blende)	1 17 6	13s.	11s. 12s.	Dec. 1862
10000	Great Treveddoe (coppe.)	0 14 0	—		Aug. 1861
6000	Great Tywarnhaile (copper)	3 10 0	—		June, 1861
3730	Great Wheal Baddern (tin)	6 6 0	—		Dec. 1862
6000	Gt. Wh. Busy (cop., tin), Ken.	15 0 0	5½		Dec. 1862
5000	Grosvenor (ld.) [2500 £1 pd., 2500 7s. pd.]		—		
4910	Gurlyn (cop., tin), St. Erth	1 18 11	—		Feb. 1862
8634	Gwydyr Park Con., Llanrwst	0 18 6	—		Dec. 1861
6400	Harwood (ld.), Durham [L. £1]	0 5 6	—	1⅛	Nov. 1861
7219	Hawkmoor (tin, cop.) Calstock	3 0 6	—		May, 1862
1000	Haye Valley (tin), Callington)	0 4 0	—	1¼ 1⅛	
6000	Hingston Down (cop.), . [S.E.]	5 5 0	—		Dec. 1862
10000	Holmbush [5000 £5 2s. pd., 5000 5s. pd.]		—		
6000	Illogan (tin and copper)	0 5 0	—	⅝ ⅞	July, 1862
40	Imperial Silver-Lead, Dolgelly	65 0 0	—		Jan. 1862
6000	Keswick (lead), Portinscale.	5 6 6	—		Mar. 1862
6000	Lady Bertha (cop.) [S.E.]	2 2 0	—	1¼ 1⅜	Oct. 1862
963	Lelant Cons. (tin), Uny Lelant	34 0 0	—		Sept. 1862
1019	Leeds & St. Aubyn (tin, cop.)	16 4 4	—		Feb. 1862
240	Llangan (ld.), Glamor. [L. £25]	5 0 0	—		Aug. 1862
500	Long Rake (lead), Flint	14 0 0	—	14 16	Sept. 1862
2000	Lower Park Denbighshire [L.]	3 3 0	—		Nov. 1862
10000	Lower Taldrws [L. £2½]	1 10 0	—		Oct. 1861
6000	Maudlin	3 14 0	—		Dec. 1862
4480	Merllyn (lead), Flint	3 16 6	—	⅛ ¼	Dec. 1862
22000	Merryfield (lead) [L.]	0 12 0	—		May, 1860
3475	Michell (lead), Flint	0 2 6	—		Nov. 1861
1024	Mill Pool	15 10 0	—		Sept. 1862
5000	Molland (cop.), S. Moulton	2 9 6	—	3s. 5s.	Nov. 1862
1024	Nangiles (tin, copper), Kea	12 10 0	8	7 8	Dec. 1862
50	Nanteos (sil.-ld.), Llanbardan	—	—		Jan. 1862
5000	Nanteos and Penrhiw [L. £4]	3 12 0	—		
512	Nant Minera [L. £20]	4 0 0	—		Dec. 1862
2400	Nant-y-Iago (ld.), Merioneth	3 12 6	—		Nov. 1862
250	Nanty Mines (ld.), Montgom.	20 0 0	—		Fully paid.
6400	Nether Heath (lead), Dufton	0 15 6	—		April, 1860
6400	N. Crow Hill (ld.), St. Stephen	2 7 6	—		Oct. 1862
6000	New E. Birch Tor and Vitifer	—	—		
6514	New E. Wh. Russell, Tavistock	0 6 0	—		Oct. 1862
400	New Hendra (tin, cop.), Breage	0 15 0	—		Oct. 1862
6000	New S. Caradon (cop.), St. Cleer	0 10 6	—		Dec. 1862
6000	New Treleigh Cons., Redruth	1 13 0	—		Nov. 1862
6000	New Wheal Prospidnick	0 7 6	—		Nov. 1862
400	New Wh. Seton) cop.), Camb.	21 10 0	145	150	Dec. 1862
2500	N. Wh. Vaddon (tin), Marazion	1 8 0	—		Oct. 1862
6000	Nidderdale (ld.), Yorks. [L. £1]	0 15 0	—		Jan. 1861
4500	No. Budnick and West Mount	0 7 0	—		Aug. 1862
1024	North Buller (cop.), Redruth.	22 17 6	—		Aug. 1862
6000	Nor. Clifford (cop.), Gwennap	0 5 0	—		Nov. 1860
4000	North Cornwall (Endellion)	—	—		No call.
20000	North Devon (sil.-ld.) [L. £1]	0 10 0	—		July, 1862
5000	N. Dolcoath (cop.), Camborne	2 11 6	—		Nov. 1862
1000	North Fortescue (copper)	1 14 0	—		Oct. 1862
2500	North Frances, (cop.) [S.E.].	13 16 0	—		Dec. 1862
1366	N. Grambler (cop.), Redruth	2 15 0	—		Nov. 1862
6000	N. Gt. Work, Breage [L. £3]	2 1 0	—	⅞ 1⅛	July, 1862
6000	N. Hafod (sil.-ld.), Car. [L. £2]	1 5 0	—		Aug. 1862
16000	N. Hallenbeagle (tin, cp.) [L.]	—	—		Dec. 1861
2000	North Jane (tin, silver-lead).	4 15 0	—		July, 1862
6000	North Kit Hill (tin, copper)	0 2 6	—		Sept. 1861
6000	North Laxey (lead) Isle of Man	—	—		Fully paid.
2000	N. Levant (tin, cop.), St. Just	7 0 0	—		Aug. 1862
15000	North Minera (lead) [L.]	1 0 0	14s.	10s. 11s.	Fully paid.
4000	North Phœnix (copper)	3 18 6	7⅛	6¾ 7	Sept. 1862
32	No. Pool (tin & cop.), Illogan	125 0 0	—		Nov. 1862
6000	North Porthilly (silv.-lead)	—	—		Aug. 1862
700	N. Rosker (cop.), Camborne	20 0 0	50	59¼ 60½	Nov. 1862
5000	N. Treisther (sil., cp.), Padstow	1 0 0	—		Feb. 1860
6000	N. Wh. Basset (cop., tin) [S.E.]	2 12 0	—	2¾ 3	Dec. 1862
1024	North Wheal Busy (cop., &c.)	9 12 7	—		Dec. 1862
5610	North Wheal Crofty [S.E.]	2 3 0	5⅛	5⅛ 5⅜	Nov. 1862
4800	North Wh. Ludcott (St. Ive)	1 0 0	—	1 1½	Dec. 1862
6144	N. Wh. Robert, Samp. Spiney	2 12 11	—		July, 1861
4108	North Wheal Trelawny (lead)	3 9 0	—		Oct. 1862
5900	North Wheal Vor (tin), Breage	3 0 0	—		June, 1861
4000	N. Wrey (ld.), St. Ive [L. £2].	0 17 6	—		Feb. 1862
4096	Okel Tor (cop.), Calstock	6 6 6	—	5¾ 6	Sept. 1861
6000	Old Wh. Neptune (cop.), [L.]	1 17 6	—		Nov. 1862
800	Pant-y-Buarth (ld.) [L. £10].	7 0 0	12		Sept. 1862
1000	Pant-y-pydew (lead)	4 2 6	1⅛		Oct. 1862
10000	Parkgwyn (tin) [L. £2 10s.]	1 5 0	—		Aug. 1862
8465	Pedn-an-drea United (tin)	3 13 6	—		[illegible] 1862
5000	Pendeen Consols, St. Just	3 17 0	6⅛	5¾ 6⅛	[illegible] 1862
1000	Pengenna (ld., sil.), St. Kew.	5 0 0	—		[illegible] 1862
5000	Penhalls (tin), St. Ann's	1 10 0	—		Oct. 1862
6000	Penrait (sil. ld.), Merion. [L.]	2 2 0	—		Aug. 1862
200	Pentre Lygan (lead) [L. £30]	20 0 0	—		Mar. 1861
6000	Polhigey Moor (tin), Wendron	1 6 6	—		Sept. 1862
6400	Prideaux Wood (tin, cop.)	3 14 0	—		Sept. 1862
6000	Prosper Uni. (tin, cp.), St. Hilary	6 11 6	—	¾ 1	Dec. 1862
11789	Redmoor (cop., tin), Callington	0 11 0	—		July, 1862
5000	Rhafua (lead)	1 0 0	—		
2500	Rhoswydol and Bacheiddon	12 5 0	—		Oct. 1861
3000	Rhyscog (silver-lead) [L. £5]	1 0 0	—		Mar. 1861
10000	River Tamar Copper [L.]	1 0 0	—		Fully paid.
4096	Rosewarne United (cp., tin)	3 8 0	1	⅞ 1	Nov. 1862
5000	Round Hill (cop., ld.), Salop	2 5 6	—		Mar. 1858
8000	Royalton (tin) [£1]	0 10 0	—		Aug. 1862
2000	Scorrier Con. (tin, cp.), St. Agnes	4 7 6	—		Nov. 1862
10000	Sigford Con. (cop., tin) [L. £1]	0 16 6	—		Sept. 1862
12500	Silver Moun. (lead) [L. £2]	2 0 0	—		Fully paid.
100	Silver Rake (lead) [L. £20]	7 2 6	—		July, 1862
15000	Silv. Vein, St. Winnow [L. £1]	0 12 6	—		July, 1862
6000	Smith's Wood (tin, cp.) [L. £2]	1 18 0	—		Nov. 1862
600	Snowbrook (sil. lead) [L. £5]	4 0 0	—		
512	South Basset (cop.), Gwennap	14 10 8	8⅛	8 8⅛	Aug. 1862
100	South Bryn Gwiog (lead)	7 0 0	—		July, 1862
6400	So. Buller & W. Penstruthal.	0 12 0	—		May, 1860
4096	S. Caradon Wh. Hooper (cop.)	3 7 0	⅞	¾ ⅞	Oct. 1862
6000	So. Carn Brea (cop.) [S.E.]	6 7 0	—	2⅛ 2¼	Oct. 1862
6138	S. Condurrow (tin, cp.), Camb.	2 8 0	—		Dec. 1862
2283	Sou. Crenver (cop.), Crowan.	11 9 0	—		Dec. 1862
128	S. Crinnis (cop., St. Austell	19 0 0	—		
6000	South Darren (ld.) [L. £3½]	2 16 0	—		July, 1862
6000	S. Dolcoath & Carnarthen Con.	2 13 0	—		Dec. 1862
5000	S. Foxdale (ld.) I. of Man [L. £5]	1 0 0	—		
6000	South Gernick (tin), Crowan.	0 2 6	—		Oct. 1860
2000	South Gorland	3 15 0	6		Dec. 1861
1024	South Herodsfoot	3 2 6	5	4 4⅛	
4000	South Minera [L. £5¼]	2 12 0	5	5 6	May, 1862
5425	So. Phœnix (cop.) Linkin.	6 11 7	—		Nov. 1862
1024	South Tresavean, Gwennap	4 3 9	—		Oct. 1862
4096	S. Wh. Betsy, Mary Tavy, Dv.	1 7 9	—		Sept. 1862
937	So. Wh. Crofty (cop.), Illogan	10 18 10	17	20 21	Oct. 1862
1024	S. Wh. Ellen (cp.), St. Agnes	9 18 2	—		Aug. 1861
1000	South Wh. Kitty (tin), Lelant	1 10 0	—		Oct. 1861
6000	So. Wh. Leisure (tin & cop.)	0 2 0	—		May, 1862
1024	S. Wh. Lovell (tin), Wendron	1 10 7	—		May, 1862
400	So. Wh. Seton (cop.) Camborne	37 3 0	26		Dec. 1862
794	Spearne Cons (tin), St. Just.	6 12 0	—		Mar. 1862
970	St. Aubyn and Grylls (cp., tin)	7 14 6	—		Aug. 1860
15000	St. Cuthbert Ld. Smelt. [L. £5]	1 0 0	1⅛	1⅜ 1⅝	Nov. 1862
40000	St. David's (gold) [L. £2 10s.]	1 0 0	1⅛	1 1¼	Nov. 1862
4000	St. Day United (tin), Redruth	2 3 9	3⅛		May, 1862
1024	St. Ives Wheal Allen (tin)	9 3 1	—		Oct. 1862
6000	St. Just (tin & cop.) [L. 2½].	2 0 0	—		Dec. 1862
640	Stamp Office (lead), Mold	1 0 0	—		Jan. 1862
920	Stray Park (cop., tin) [S.E.].	29 17 0	41	38 39	Nov. 1862
3000	Tees Side (ld.), Cumb. [L. £1]	0 13 0	—		Aug. 1861
6000	Tolcarne (cop.), Camborne	1 8 0	—		July, 1862
2000	Trefulack Uni. (tin), St. Enoder	3 5 0	—		Sept. 1861
5000	Treloweth (copper), St. Erth.	6 10 8	—		June, 1862
1024	Trencrom (tin), Uny Lelant	12 2 3	—		Oct. 1862
3270	Tresellyn and Scaddick Cons.	1 8 10	—		June, 1862
5600	Trevenen and Tremenheere	6 8 0	—		Sept. 1862
4096	Treweatha (sil.-ld.), Menheu.	5 3 6	—		Nov.* 1862
2048	Treworlis (tin), Wendron	3 18 10	—		Dec. 1862
2500	Trimley Hall [1250 £1 pd., 1250 7s. 6d. paid]			19s. 21s.	
4000	Trumpet Unit. (tin), Wendron	1 5 0	—	7s. 8s.	July, 1862
3000	Tyne Head (ld., cop.) [L. £1].	0 14 0	—		Oct. 1862
800	Tynewydd (sil.-ld.), Cardigan.	0 5 0	—		Dec. 1861
1024	Tyringham Consols (tin)	2 0 0	—		Oct. 1861
20000	Vale of Towy (lead), Carmar.	0 14 6	7s.	5s. 7s.	
4000	Wentnor [L. £2½]	2 1 0	—		July, 1862
3000	West Alfred (copper) [L. £3]	1 0 0	—		Nov. 1861
20000	West Beam [L. £1]	0 12 6	—		Sept. 1862
100	W. Bryn Gwiog (ld.) [L. £20]	9 0 0	—		Feb. 1862
1218	W. Condurrow (tin, cop.), Cam.	7 16 3	—		Dec. 1862
16	West Denbigh (ld.), Denbigh.	35 0 0	—		Oct. 1860
30000	West Devon Con. (cop.), [L.]	1 0 0	—		Fully paid.
4216	W. Great Work (tin), Germoe	0 13 6	—		Dec. 1862
6000	West Grylls (tin)	0 2 6	—		Aug. 1862
19000	West Par Con. (cp.) St. Blazey	1 11 0	—		Dec. 1862
6000	W. Polmear (tin, cp.), St. Austell	0 15 6	—		Oct. 1862
1600	W. Rose Down (cop.), Caradon	6 12 6	—	15 20	Dec. 1862
256	West Sharp Tor (cp.) Rillaton.	143 0 0	—		Sept. 1862
1056	West Stray Park (cop.), Camb.	8 9 0	—		April, 1862
5000	West Tolcarne (cop.), Crowan	1 15 0	—		Feb. 1862
512	West Tolgus (cop.), Redruth.	29 10 0	54	54 56	Oct. 1862
5120	West Tolvadden	1 18 6	—		Oct. 1862
5481	West Trevelyan (tin, copper)	3 5 10	⅛		Dec. 1862
4000	West Wendron (tin), Wendron	1 0 6	—		Jan. 1862
512	West Wheal Frances, Illogan	77 5 0	—		Nov. 1862
10000	West Wheal Jane (tin, &c.)	3 1 0	—		July, 1862
1024	West Wheal Lovell, Wendron.	2 13 8	—		Mar. 1862
6000	Wheal Agar (copper), Illogan	3 14 0	—		Nov. 1862
1024	Wh. Anna (ld., blende), Perranz.	0 13 6	—		Oct. 1861
5000	Wheal Annie (cop.), Gwinear	1 13 0	—		Sept. 1262
5990	Wh. Arthur (cop.), Calstock.	3 19 0	9s.	⅜ ⅝	Sept. 1862
6000	Wheal Caradon (copper)	1 0 0	—		Nov. 1862
6000	Wheal Crebor (cop.), Tavistock	1 2 0	⅛	23s. 25s.	Oct. 1862
512	Wh. Damsel (cp., tin), Gwennap	29 13 6	—		Oct. 1862
4096	Wh. Edward (cop.), Calstock	7 14 6	1⅝	1¾	Nov. 1862
4000	Wh. Emma (cp) Buckfastleigh	2 15 0	—	1¾ 2	Nov. 1861
2000	Wheal Falmouth & Sperries.	3 5 0	—		Oct. 1862
6000	Wh. Grenville (copper) [S.E.]	7 15 0	5¼	5 5⅛	Nov. 1862
5120	Wheal Harriett, Camborne	4 6 6	3	3⅛ 3⅞	May, [illegible]
6000	Wh. Harris (ld., cop.), Lifton	0 10 6	—		Feb. [illegible]
1024	Wheal Emily Henrietta	4 0 0	—		[illegible] 1862
2048	Wheal Hope (sil.-ld.), Perran	0 18 0	—		[illegible] 1862
6000	Wheal Ida (sil.-lead), St. Ive.	—	¾	¾ 1	
1024	Wheal Margery (tin, copper)	17 18 0	—	4	[illegible] 1862
6000	Wh. Norris (tin, cp.), St. Cleer	2 10 7	—		Oct. 1862
1024	Wheal Polmear, St. Austell	3 13 9	—		
6000	Wh. Pollard (cop.), St. Neot's	2 10 0	—		Oct. 1861
970	Wh. Prosper (cp., tin), Breage	10 15 0	—		July, 1862
25000	Wh. Prudence St. Ag. [L. £1]	0 2 6	—		May, 1862
240	Wh. Reeth (tin), Uny Lelant	96 10 0	42⅛		Sept. 1862
500	Wheal Sarah (cop.), Lanivet	0 9 0	—	1	Dec. 1862
1024	Wh. Sicily (sil.-ld.), Broadoak	4 17 6	—		May, 1862
4096	Wheal Sidney (tin), Plympton	4 9 1	—		Oct. 1862
2048	Wh. Sithney & Carnmeal Uni.	8 0 0	—		Nov. 1862
1024	Wheal St. Andrew (copper)	5 0 0	—		Jan. 1860
512	Wh. Trannack (tin), Sithney	3 0 0	—		Oct. 1862
1022	Wh. Tremayne (tin), Gwinear	13 2 6	—		
6000	Wheal Union (cop.), Redruth	3 17 0	6⅛	5¾ 6	Dec. 1862
6000	Wh. Unity (cop., tin), Gwinear	12 2 0	13s.	11s. 13s.	Nov. 1862
4096	Wh. Uny (tin, cop.), Redruth	9 3 6	7⅛	7½ 7⅜	Sept. 1862
1024	Wh. Vyvyan (cop.), Constantine	6 5 0	—		Dec. 1862
6000	Wheal Welcome (tin, copper).	1 0 0	—		April, 1852
6400	Whitford (lead), Holywell	10 16 6	—		May, 1869
244	Worvas Downs (tin), Lelant.	6 7 0	7⅛		Dec. 1860
3097	Yarner (copper), Devon	3 1 6	—		Dec. 1862

MISCELLANEOUS.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
10000	Anglo-Mexican Mint	10 0 0	—		Fully paid.
20000	Australian Agricultural	19 0 0	—		
50000	East India Irrigation and Canal	2 0 0	—		
80000	Metrop. Rail, Carriage, &c.	4 0 0	—		
6000	Nerbudda (coal & iron [L. £20]	5 0 0	—		
1724	N. Bruns. and N. Scotia Land.	81 0 0	—		
10000	Ottoman Gas [L. £5]	1 0 0	—		
15000	Royal Mail Steam	60 0 0	—		
14000	South Australian Land	2 0 0	—		

*** Those mines with [S.E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been incorporated with Limited Liability.

*** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, No. 26, FLEET STREET, E.C., where all communications are requested to be addressed.—*January* 10, 1863.